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ABSTRACT

As an aid to people who want detailed information on the methodology of the project "Monitoring the Future: A Continuing Study of the Lifestyles and Values of Youth," information is presented on the scope and purposes of the project, study design and procedures, data collection procedures, measurement content, and questionnaire format. The project was designed to provide an ongoing assessment of the changing behaviors, plans, and preferences of American youth. The study involved a nationwide survey of each new high school senior class in over 130 secondary schools since 1975. In addition, annual follow-up surveys are mailed to members of each class for a six-year period after graduation to determine changes in attitude regarding personal lifestyles, confidence in social institutions, intergroup and interpersonal attitudes, concerns about conservation and ecology, behavior and attitudes related to drug use, and other social and ethical issues. The document is presented in four major sections. In section one, the scope and purposes of the project are outlined. In section two, the research design is described. Information is presented on the rationale, base-year data collections, and follow-up data collections. Section three focuses on measures, including monitored and background variables, high school and post-high school experiences, and questionnaire organization and format. Information is also presented on sample representativeness and response validity. The final section examines analysis strategies and stresses the need for multi-cohort longitudinal data. The document concludes with appendices which offer information on sampling procedures, questionnaire items, measures, study description, instructions to teachers, and a flyer to senior students. (DB)

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THE MONITORING THE FUTURE PROJECT

DESIGN AND PROCEDURES

Monitoring the Future Occasional Paper 1

Jerald G. Bachman
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Institute for Social Research
The University of Michigan
Ann Arbor, Michigan

1978

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PREFACE

This is the first in a series of occasional papers from the project, Monitoring the Future: A Continuing Study of the Lifestyles and Values of Youth. The series will include methodological papers, such as the present one, reporting aspects of study design and procedures which are too detailed and specific for general publication but which may be of interest to those who wish an in-depth understanding of the project. A second type of occasional paper in this series will contain substantive analyses, a number of which will subsequently be published in journal articles or book chapters. Their inclusion in the series permits earlier dissemination and, in some cases, more detailed description than might otherwise be possible.

The present paper begins by outlining the conceptual scope and purposes of the Monitoring the Future project. It then provides a detailed description of the research design, data collection procedures, measurement content, and questionnaire format. Appendices include further information on sampling, copies of key measurement sections, and materials used in carrying out the data collections. We have tried to provide sufficient information so that others who wish to evaluate our results, replicate aspects of the study, or analyze archived data from the study, can gain an adequate understanding of our methodology.

The Monitoring the Future project is designed to be an ongoing series. It began in 1974 with a five-year launching grant; the initial year was funded bythe White House Special Action Office for Drug Abuse Prevention, and subsequent years have been funded by the National Institute on Drug Abuse. Although considerable emphasis is placed on drug use and closely related attitudes and behaviors, the project is not limited to those topics. For example, some project work is currently funded by a grant from the National Institute of Education for the purpose of studying "sex role attitudes in young women and men." It is anticipated that additional special topics for analysis and reporting will, from time to time, be proposed and funded during the course of the project.

Acknowledgments

A great many people have contributed to the launching and development of this research effort. We are indebted to a number of officials of the National Institute on Drug Abuse and the Special Action Office for Drug Abuse Prevention for their encouragement and advice at the outset--in particular, Richard Bucher, Robert DuPont, William Pollin, and Louise Richards. To the members of our Advisory Panel we also express our thanks for their review and suggestions regarding instrumentation and design. In addition to Drs. Bucher and Richards, the committee members are John Ball, Donald Campbell, Ira Cisin, Wilbur Cohen, O. Dudley Duncan, Dorothy Gilford, Eric Josephson, Robert Kahn, Donald Michael, and Lee Robins.

Our colleagues at the Institute for Social Research and elsewhere who shared their insights and, often, their most cherished instrumentation are too numerous to mention; but their contributions are greatly appreciated. To the director of the Survey Research Center's Sampling Section, Irene Hess, we owe a particular debt for the creativity of her sampling design for the study. The contribution of the SRC Field Section also has been invaluable.

The many present and former members of the project staff have, of course, contributed greatly to the building of this large and complex research series. To date the staff has included:

Donna Ando
Margaret Bailey
Dawn Bare
Ellen Berger
Mary Lou Bewley
Katherine Blatt
Mary Lea Bonucchi
Marcy Breslow
Mary Lou Davis
Mary Dempsy
William Diedrich
Karen Donahue
Leslie Eveland
Halford Fairchild
Walter Gruhn
James Hersey
A. Regula Herzog
Mark Krell
Sally Lawson
Ludmilla Litus
A. Kathryn Loker
Regina Lumbard
Oksana Malanchuk
Wayne McCulloch
Joan McGraw
John Miller
Marion Morse
Jim Neveaux
Patrick O'Malley
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Sharon Pietila
Joseph Pleck
Deborah Poinier
Judith Redmond
Barbara Renaud
Maria Sanchez
Ann Taylor
Richard Taylor
Lynda Tolen
Sandra Wronski
Thelma Wurzelbacher

Finally, we would like to acknowledge the tens of thousands of high school seniors, their teachers and their principals, whose cooperation and generous contribution of time make the Monitoring the Future project possible.

December, 1978
Ann Arbor, Michigan

Jerald G. Bachman
Lloyd D. Johnston

SCOPE AND PURPOSES OF THE PROJECT

This paper describes a research project entitled "Monitoring the Future: A Continuing Study of the Lifestyles and Values of Youth." As the title suggests, the project is designed to provide an ongoing assessment of the changing behaviors, plans, and preferences of American youth. The study involves a nationwide survey of each new high school senior class; the first was the class of 1975. In addition, annual follow-up surveys are being mailed to each class for a six-year period after graduation.

The issues addressed are broad in scope and of fundamental importance to the nation: views about personal lifestyles, confidence in social institutions, intergroup and interpersonal attitudes, concerns about conservation and ecology, behaviors and attitudes related to drug use, and other other social and ethical issues. A major emphasis is placed on drug use (and attitudes about drugs) both because the use of drugs is itself a particularly serious problem among young people, and also because it is a symptom of other deeper problems and discontents.

There are several reasons for selecting the senior year in high school as an optimal starting point for charting the views of young adults. First, the senior year represents the end point in our system of universal public education, and thus reflects the cumulated impact of that educational system. A research effort that examines the views of seniors will thus indicate changes (or the lack thereof) in the impact of public education in the nation.

Second, the end of high school marks a point from which young people move into a number of different new environments with educational and socializing consequences—college, military service, business firms, etc. By comparing responses given as seniors with later responses in follow-up measurements, we can assess some of the impacts of these different post-high school experiences. Except for college, these social environments have been the subject of very little systematic attention until now, despite the fact that the majority of young Americans never attend college.

Finally, there are important practical advantages to building our system of data collections around samples of high school seniors, since the last year of high school constitutes the final point at which a reasonably good national cross-section of young people can be sampled accurately and studied economically.

Each of the points mentioned above is discussed at greater length in the pages that follow. We begin with an overview of the research topics addressed by the Monitoring the Future project. Then we describe our research design and measures in considerable detail, including the rationale for the procedures that are used. Finally, we offer some brief observations on analysis strategies and possibilities.

Meeting Research Needs in the Drug Field

Certain key facts about illicit drug use in the United States have been fairly well established. We know, for example, that at the present illicit drug use is primarily a youth phenomenon--that it occurs disproportionately among the young

and that, if onset is to occur, it is most likely to occur during late adolescence (National Commission on Marijuana and Drug Abuse, 1972, 1973; Gallup Opinion Index, 1969). However, it has not been a phenomenon which has affected the youth of all cohorts equally--either in terms of drugs used, levels attained or age of onset.

We know further that illicit drug use is a complex social behavior—that is, one very largely determined by social and cultural influences. Illustrative of this point are the findings of a number of national studies demonstrating that illegal drug activities vary substantially as a function of region of the country, size of community, size of high school attended, socioeconomic level of the family, race, stability of residence, college attendance, military service, service in Vietnam specifically, and peer usage (Gallup Opinion Index, 1969; National Commission on Marijuana and Drug Abuse, 1972, 1973; Johnston, 1973b; Robins, 1973; Josephson, 1974; Abelson & Fishburne, 1976; O'Donnell et al., 1976).

Illicit drug use has also been found to relate rather strongly to certain social value and lifestyle orientations which are evolving rapidly among the young—including, but perhaps not limited to, the "hang-loose ethic" or the "counter-culture syndrome." And a part of the "hang-loose ethic" is rather pronounced alienation from some of society's central institutions, including the government, religion, private enterprise, the military, schools and the family to some extent (Suchman, 1968; Clark and Levine, 1971; Groves, 1973; Johnston, 1973b).

In sum, these facts are known: (1) illicit drug use is disproportionately a youth phenomenon, and one which is changing rapidly from cohort to cohort; (2) it is a complex social behavior in which dramatic variation can be found from one social or cultural milieu to another; and (3) it is a behavior which to a considerable degree is associated with particular value and lifestyle orientations. Given these facts about the nature of illicit drug use in contemporary America, it seems fair to conclude that in the future the size and contours of the drug problem will depend largely on the drug habits of future cohorts of young people, and that their drug behaviors will in turn depend on (a) the impact of their socializing environments (school, media, peers, work, college, military, etc.), (b) the changing values and lifestyles which they adopt, (c) the role that drugs play in those changing lifestyles, and (d) changes in the larger society, particularly changes in drug laws.

Therefore, we suggest that the following types of knowledge are among those particularly needed in this area:

- Continuing information about the drug behaviors of young people—about the enlargement or diminution of problem behaviors and about new problems and new programs needed in the area.
- Information on the locus of excessive drug use within the population.
- Information on changing attitudes toward the use of various drugs.
- Information on the changing social meaning of drug use.
- Information on the changes in drug use associated with various maturational stages and various social environments, particularly in the years of late adolescence and early adulthood, and information on whether the effects of those environments are changing or could be changed.

- Information on the impact of various historical events—in particular, changes in laws governing the use and sale of marihuana.

Knowledge of the types mentioned above obviously does not translate directly to specific policy decisions, but the availability of such information should enchance the decision-making ability of policy makers, since it would provide considerably more insight into the size and nature of the problems, the rate of change occuring nationally and in subgroups, some of the social and psychological dynamics involved, and the effects of major planned interventions in the area (such as changed drug laws and new drug education programs).

Meeting the need for such information, however, requires more than a continuation of past research efforts in the field. It requires research on a large scale, to permit the reliable assessment of levels and rates of change for relatively rare events, in particular the use of the more serious as well as the newer illicit drugs. It requires national research, if the findings are to be generalizable to the most policy relevant population.* It also requires longitudinal research to disentangle developmental changes from cohort and secular changes and to link them to specific maturational experiences. But most important it requires systematic and continuous research, so that comparisons can be made from one time to another and from one situation to another. The task of those who have attempted to integrate findings in the field—and particularly to assess cross-time changes in usage levels—has been made very difficult by seemingly endless variations in instrumentation, sampling and field procedures. Only when these features of research designs are made comparable can the amounts and rates of change be reliably estimated.

As the move toward social reporting continues to gain momentum in this country, there is perhaps no area more clearly appropriate for the application of systematic research and reporting methods than the drug field, given its extremely rapid rates of change, its importance for the well-being of the nation, and the amount of legislative and administrative intervention which continues to be addressed to it. The present study is intended to contribute to such a system of social reporting and research.

Potential Research Products in Other Fields

Just as the drug field can benefit from a systematic, ongoing program of research, so can a number of other areas—particularly areas in which rapid change is taking place among youth and (from a policy perspective) areas in which the individual views and behaviors in the aggregate can constitute a social problem. Monitoring the Future encompasses a number of such problem areas which are of major societal importance in their own right.

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*Much of past research in this field, even some of the large-scale research, has suffered from a lack of generalizability to known populations. In addition, the majority of survey studies have worked with populations which lacked variability on many dimensions of established importance (e.g., region, urbanicity, race, educational attainment, etc.).

Relationship to "the System." The way in which young people relate to the major controlling institutions in our society—governmental, educational, and economic—obviously has a great deal to do with our future potential as a nation. Whether these institutions are viewed with trust and respect or fear and hostility, whether they are seen as susceptible to reform or completely intransigent, and whether they evoke participation and cooperation or withdrawal and attack from our future citizenry (or even major subgroups)—all of these are issues of vital concern.

The particular social institutions on which we focus include (a) our system of national government, including the presidency, Congress, and the political party structure; (b) several agencies of government such as the police, the judicial system, and the military; (c) the system of education, and educational opportunity, including secondary and post-secondary; and (d) the economic/vocational system and its opportunity structure, including business, unions, professions and so forth.

Relationships Among Subgroups. Throughout history, people have hit upon innumerable ways by which to discriminate others from themselves and thus mark them as worthy of differential treatment: race, religion, political ideology, socioeconomic status, national origin, regional origin, language, age or generation, sex, and so on. The internal schisms which appear most serious and susceptible to change in the United States at this time appear to rest on race, age or generation, and sex. Therefore, the study monitors perceptions, attitudes, knowledge, and behaviors relevant to each of these dimensions. We hope to learn whether understanding and empathy are increasing or decreasing with each new cohort of our young, and under what conditions. For example, some of the conditions which may affect developing attitudes between these groups would include education (amount and type), major national events (persuasive national leadership, violent outbursts, etc.), and changes in living patterns (integrated housing or schools, more women entering professions). The impact of at least some of these environmental changes can be assessed by looking at historical trends for the whole population being studied and also by comparing such trends for those subgroups which experience certain conditions (extended education, integrated schools) versus those who do not.

Changing Conceptions of Social Roles. Certain traditional roles such as spouse, worker, student, soldier, or citizen are the basic building blocks from which our current social institutions are constructed. Such roles derive their very definition and continuity from the complex of expectations, norms, and values which are shared in the population. As these latter factors change and evolve with new generations, there will be resulting changes in the roles and institutions. Witness, for example, the changes now taking place in the nation's schools and military forces.

Because of the central importance of these institutions and their component roles for the successful integration of our society, the study monitors some of the perceptions and values which underlie them. For example, the study monitors expectations and aspirations related to marriage, parenthood, vocation, education, service to society, and political participation. The design further permits an examination of the extent to which expectations and aspirations change over time as a function of actual participation in such roles.

At the level of the individual, one's personal values and definitions of these roles may be thought of in combination as one's preferred lifestyle. It may be necessary to study such lifestyle patterns in order to fully understand the changes

taking place in particular roles and values. Therefore, the study includes measures of several other dimensions of lifestyle: the way in which young people use their time, their attitudes about the use of various drugs, their use of the media, and their attitudes toward religion.

The extent to which different life styles emerge and the extent to which there is mutual tolerance of and by others, will be central issues for the nation's future. We therefore feel that they are issues particularly suitable for monitoring among youth.

Ecology and Environment. Plans and behaviors of the young in relation to ecology, the environment, and the related issue of overpopulation, will be investigated because we believe that in these areas—like those above—the sum of the actions of individual citizens has a great impact on society. We may be able to predict national trends in these areas by monitoring plans and attitudes relevant to family size, material lifestyle aspirations, willingness to sacrifice to prevent pollution or overpopulation, and willingness to support or oppose relevant policy measures. Further, we view attitudes and actions in these areas as one important constellation of factors in a person's lifestyle and thus relevant to understanding his or her attitudes and behaviors in other domains.

Personal Happiness and Fulfillment. Our design includes measures of happiness and satisfaction with various domains of life, not only because we think these factors may be predictive of other behaviors and decisions, but also because they are of clear importance in their own right. It has been noted by some observers (Jencks et al., 1972; Johnston & Bachman, 1976) that the happiness of young people during adolescence is too often ignored in systematic research in favor of educational attainment and academic achievement. Therefore, we have attempted to include a broad sampling of measurement in this area for monitoring and in-depth analysis.

RESEARCH DESIGN

Overview and Rationale

The monitoring system consists of (a) a series of annual, nationwide questionnaire surveys of seniors in high schools, which began with the class of 1975; and (b) annual follow-up surveys mailed to a subset of each sample for the first six years following their graduation. Thus the population of interest consists of most young American men and women, in the age range of approximately 18 through 24, monitored through an ongoing series of cohort analyses, as illustrated in Figure 1.

This procedure of following each new high school class longitudinally will permit us to examine four kinds of trends:

1. Changes from one graduating class to another, i.e., consistent differences between cohorts. An example would be a difference between the high school classes of 1975 and 1978 that remained after controlling age and date. (Presumably the classes of 1976 and 1977 would fall somewhere between the classes of 1975 and 1978, suggesting a somewhat gradual shift over a three-year span.)

Figure 1. OVERVIEW OF THE COHORT-SEQUENTIAL DESIGN

High School Senior Class of:	Year of Data Collection									
	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984
1975	18	19	20	21	22	23	24			
1976		18	19	20	21	22	23	24		
1977			18	19	20	21	22	23	24	
1978				18	19	20	21	22	23	24
1979					18	19	20	21	22	23
1980						18	19	20	21	22
1981							18	19	20	21
1982								18	19	20
1983									18	19
1984										18

NOTE: Cell entries indicate average age at time of data collection

2. Period effects (secular trends) reflected across all cohorts without reference to age. An example would be a shift in some dimension from 1978 to 1979 that would be evident in the longitudinal data for each earlier class (1975 through 1978) and also evident in the comparison of seniors from the classes of 1978 and 1979.

3. Life cycle or maturational changes which show up consistently in the longitudinal data from all graduating classes in various years.

4. Longitudinal changes reflecting the differential impacts of various posthigh school environments and experiences, including college, military service, various types of employment, homemaking, unemployment, marriage, and parenthood.

We recognize that these several types of trends or changes, which we can distinguish in the abstract, are likely to be complexly intertwined in the real world.

As we shall discuss later, the analysis problems of separating one pattern from another are formidable. Thus we do not want to convey the impression that the monitoring system we employ will provide an easy solution to such problems. But we do want to point out that the data collected under the present monitoring system will open up analysis possibilities that would not exist in either a longitudinal study that followed a single panel of respondents for a number of years, or a series of once-only cross sections (e.g., surveys of each high school class without any longitudinal follow-up). Given our multi-cohort longitudinal design, we expect to do more than simply discover that some changes have occurred. At the very least, we expect to explore the several alternative explanations for change outlined above and discover which are the most probable.

Reasons for Beginning with High School Seniors. As was mentioned earlier, there are several reasons for our choice of the senior year of high school as an optimal starting point for monitoring the attitudes, experiences, and behavior of young adults. First, the completion of high school represents the end of an important developmental stage in this society, since it demarcates both the end of universal public education and, for many, the end of living in the parental home. Therefore, it is a logical point at which to take stock of the cumulated influences of these two environments on American young people.

Second, the completion of high school represents the jumping-off point from which young people diverge into widely differing social environments. Environments such as college, business firms, military service, and the like, are generally thought to have new and important socializing effects. Measurements taken near the end of twelfth grade represent the state of each graduating class before entering these environments. By comparing these "before" measures with the follow-up or "after" measures taken over the six years following graduation, we can assess many of the impacts of these different post-high school experiences.*

---

*Analyses from our earlier work on the Youth in Transition project illustrate this point. Drug use, as well as a number of attitudes, plans, etc. shifted differentially after high school for those who went to college versus those who did not. In the class of 1969, young men who entered college showed increases along such dimensions as drug use, political alienation, opposition to the Vietnam War, and liberal racial attitudes (Johnston, 1973b; Bachman & Van Duinen, 1971; Bachman, O'Malley, & Johnston, 1978).

But entering new environments is not the only important change which coincides with the end of high school. Most young men and women now reach the formal age of adulthood shortly before or after graduation. More important, the years following high school mark the assumption of real adult roles, including financial self-support, living away from parents, marriage and parenthood. These role experiences are likely to have substantial impacts upon the dimensions to be monitored.

Finally, building a system of data collections around samples of high school seniors has some practical advantages. The last year of high school is the latest point at which a national sample of an age-specific cohort can be obtained using school sampling and in-school data collection. The need for systematically repeated, large-scale samples from which to make reliable estimates of change requires that considerable stress be laid on efficiency and feasibility; the present design meets those requirements.

One limitation in the present design is the fact that it does not include in the target population those young men and women who drop out of high school before graduation (or before the last few months of the senior year, to be more precise). This excludes a relatively small proportion of each age cohort—between fifteen and twenty percent.

For the purposes of estimating certain characteristics of the entire age group, the exclusion of this segment introduces certain biases; however, their small proportions set outer limits on the bias (Johnston, O'Malley & Eveland, 1978; Johnston, Bachman & O'Malley, 1977, Appendix B). Further, since the bias from missing dropouts should remain just about constant from year to year, their omission should introduce little or no bias into the various types of change being estimated for the majority of the population. In fact, we suspect that the changes observed over time for those who are high school graduates are likely to parallel the changes for dropouts in most instances. Nevertheless, we recognize the value of periodically checking the results of the present monitoring system against those emerging from other data collection systems using different methods, such as household interviews. It is encouraging to note that when we have compared data from this study with those from interview studies in estimating levels of drug use, the findings have shown a high degree of similarity.

Base-Year Data Collections

As indicated in Figure 1, the design involves data collections from high school seniors during the spring of each year, beginning with the class of 1975. Each data collection represents the start of a panel study of that year's high school class. Thus we refer to each senior class survey as a base-year data collection.

Samples of High School Seniors. The base-year data collection each year takes place in approximately 115 public high schools and 15 private high schools, selected by the Sampling Section of the Survey Research Center to provide an accurate cross section of high school seniors throughout the United States. The sampling procedure is multi-stage (Kish, 1965) as follows: Stage 1 is the selection of particular geographic areas, Stage 2 is the selection of one or more high schools in each area, and Stage 3 is the selection of seniors within each high school.

Stage 1. The geographic areas used in this study are the primary sampling units (PSU's) developed by the Sampling Section for use in the Survey Research Center's nationwide surveys. These consist of 74 primary areas throughout the coterminous United States. In addition to the 12 largest metropolitan areas, containing about 30 percent of the nation's population, 62 other primary areas are included: 10 in the Northeast, 18 in the North Central area, 24 in the South, and 10 in the West.

Stage 2. In the major metropolitan areas more than one high school is often included in the sampling design; in most other sampling areas a single high school is sampled. In all cases, the selections of high schools are made with probability proportionate to size of senior class. The larger the senior class (according to recent records), the higher the selection probability assigned to the high school. (For a discussion of this procedure and its advantages, see Kish, 1965, pp. 220f.) When a sampled school is unwilling to participate, a replacement school is selected from the same geographic area.

Stage 3. Within each selected school, up to about 400 seniors may be included in the data collection. In schools with fewer than 400 seniors, the usual procedure is to include all of them in the data collection. In larger schools, a subset of seniors is selected either by randomly sampling classrooms or by some other random method that is convenient for the school and judged to be unbiased. Sample weights are assigned to each respondent to take account of variations in the sizes of samples from one school to another, as well as the (smaller) variations occuring at the earlier stages of sampling.

The result of this three-stage sampling procedure is a nationally representative cross section of about 17,000 to 18,000 young men and women in the senior classes of about 130 high schools throughout the United States. Because the schools are located in the primary sampling units used by the Survey Research Center for personal interview studies, we are able to use local SRC field representatives to administer the questionnaires in the schools. The data collection methods are described below; what is important to note here is that the particular area sampling procedure used in the first stage of sampling was chosen to make possible this cost-efficient field procedure.

One other important feature of the base-year sampling procedure should be noted here. Each school (except for half of those in the 1975 data collection) is asked to participate in two data collections, thereby permitting us to replace half of the total sample of schools each year. This means, for example, that the 1978 sample consisted of two distinct half-samples: roughly 65 schools which had already participated in the 1977 data collection before participating in 1978, plus another 65 schools which participated for the first time in 1978 and are expected to participate again in 1979. (Extremely few schools take part for one year and then decline to participate in the second.) One motivation for requesting that schools participate for two years is administrative efficiency; it is a costly and time-consuming procedure to recruit a school, and a two-year period of participation cuts down that recruiting effort substantially. Another important advantage is that whenever we notice an appreciable shift in scores from one graduating class to the next, we can check to be sure that the shift is not attributable to some differences in the newly sampled schools. This is accomplished by repeating the analysis using only the 65 or

so schools which participated both years. Thus far the half-sample approach has worked quite well; an examination of drug prevalence data from the classes of 1975 and 1976 showed that the half-sample of repeat schools yielded drug prevalence trends which were virtually identical to trends based on all schools.

School Recruiting Procedures. Early during the fall semester an initial contact is made with each sampled school. First a letter is sent to the principal describing the study and requesting permission to survey seniors. The letter is followed by a telephone call from a project staff member, who attempts to deal with any questions or problems and (when necessary) makes arrangements to contact and seek permission from other school district officials. Basically the same procedures are followed for schools asked to participate for the second year.

Once the school leadership agrees to participate, the principal is asked to designate one member of the high school staff to be the primary contact person who will work out survey details with the project staff. Some principals designate themselves as contact person; more often they appoint a counselor or assistant principal.

The next contact with each participating school takes place in January or February (after schedules for the spring term are firm). In this telephone conversation, or series of conversations, arrangements are made for sampling seniors when necessary, and for the method of questionnaire administration (discussed below). A specific date for the survey is mutually agreed upon by the school contact person and the local Survey Research Center representative selected to carry out the administration.

Pre-Administration Arrangements. The preferred arrangement for school data collections is to administer questionnaires during a regularly scheduled class period. This is feasible when the school has at least one class or homeroom period that is common to all seniors. In schools which have short homeroom periods segregated according to grade, it is sometimes possible to extend the homeroom time for seniors and use that occasion for data collection. As noted above, in large schools only a sample of classrooms participate in the data collection, thus yielding a sample of all seniors. In some schools it is necessary to schedule one or more mass questionnaire administrations using the school cafeteria, auditorium, or other suitable location. This procedure is less desirable because of the problems of managing larger groups of students, and because it involves more of a departure from usual class schedules (thus increasing the risk that some seniors will miss the questionnaire session). In many schools the mass administrations are quite successful; in others, the problems just noted sometimes make it necessary to schedule "recoup administrations."

Whatever system of administration is chosen, classroom or mass administration, the local SRC representative in charge of the data collection is instructed to visit the school two weeks ahead of the actual date of administration. This visit serves as an occasion for final checking of arrangements and trouble-shooting possible problems. It also is an occasion for the SRC representative to meet each teacher whose class(es) will be affected. The representative gives each teacher a four-page description of the study, a brief set of guidelines about the questionnaire administration, and a supply of flyers to be distributed to the students a week to ten days in advance of the questionnaire administration. The guidelines to the teachers include a suggested announcement to students at the time the flyers are distributed. (The description, guidelines, and flyer are included in the appendix section of this report.)

From the students' standpoint, the first information about the study usually consists of the teacher's announcement and the short descriptive flyer. In announcing the study, the teachers are asked to stress that the questionnaires used in the survey are not tests, and that there are no right or wrong answers. The flyer tells students that they will be invited to participate in the study, points out that their participation is strictly voluntary, and stresses confidentiality (including a reference to the fact that the Monitoring the Future project has a special government grant of confidentiality which allows their answers to be protected). The flyer gives all participating students a somewhat standardized introduction to the study, covers the crucial topics of voluntary participation and confidentiality, and presents some positive reasons for participation (e.g., the topics are interesting; the data will be important and widely distributed). It also provides something in writing which the students can show to their parents.

Questionnaire Administration. The actual questionnaire administration in each school is carried out by the local representatives of the Survey Research Center and their assistants, following standardized procedures detailed in a project instruction manual. The questionnaires are administered in classrooms during normal class periods whenever possible; however, circumstances in some schools require the use of larger group administrations. Teachers are not asked to do anything more than introduce the SRC staff members and (in most cases) remain present in order to help guarantee an orderly atmosphere for the survey. Teachers are urged to avoid walking around the room, lest students feel that their answers might be observed.

The actual process of completing the questionnaires is quite straightforward. Respondents are given sharpened pencils and asked to use them because the questionnaires are designed for automatic scanning. Most respondents can finish within a 45-minute class period; for those who cannot, an effort is made to provide a few minutes of additional time.

Procedures for Protecting Confidentiality. In any study that relies on voluntary reporting of drug use, it is essential to develop procedures which guarantee the confidentiality of such reports. It is also desirable that these procedures be described adequately to respondents so that they are comfortable about providing honest answers.

We noted that the first information given to students about the survey consists of a descriptive flyer stressing confidentiality and voluntary participation. This theme is repeated at the start of the actual questionnaire administration. Each participating student is instructed to read the message on the cover of the questionnaire, which stresses the importance and value of the study, notes that answers will be kept strictly confidential, and makes the following statement about voluntary participation: "This study is completely voluntary. If there is any question you or your parents would find objectionable for any reason, just leave it blank." The instructions then point out that in a few months a summary of nationwide results will be mailed to all participants, and also that a follow-up questionnaire will be sent to some students after a year. The cover message explains that these are the reasons for asking that name and address be written on a special form which will be removed from the questionnaire and handed in separately. The message also points out that the two different code numbers (one on the questionnaire and one on the tear-out form) cannot be matched except by a special computer tape at The University of Michigan. (The questionnaire cover is reproduced as Appendix B.)

Near the end of the administration period, the SRC staff member instructs students to separate the address form and then fill it out and pass it in separately. The completed questionnaires and the address forms then remain in the possession of the SRC representative until they are mailed. When mailed, the address forms go to SRC, while the questionnaires go directly to the company which scores them, using optical scanning procedures. Once the address forms are separated from the questionnaires it is virtually impossible for anyone, either SRC staff or school personnel, to match the two again. The questionnaires have an ordered sequence of code numbers, but the computer-printed numbers on the address forms are random numbers. As the instructions to students state, the only way the two could be matched would be to use the special tape at The University of Michigan. (As a matter of fact, that particular match is never made. Follow-up questionnaires with new numbers are matched to base-year questionnaires without ever directly associating respondents' names with either questionnaire.)

The statements and procedures dealing with confidentiality seem to satisfy nearly all high school seniors who participate in the project. As a part of the 1975 data collection, individual interviews were conducted in six participating schools located in five different states. Of the total of 123 interviewees, 91 had completed a Monitoring the Future questionnaire during the previous day. Only two of these respondents said that they were not aware of the project's promise of confidentiality. All respondents were asked, "How much faith do you have in this guarantee?" Two said they did not have faith in the promise; 85 percent had complete faith in the confidentiality guarantee; the rest said that they did not care (often saying they "had nothing to hide").

Follow-Up Data Collections*

As shown in Figure 1, the design of the Monitoring the Future study calls for longitudinal follow-ups of each graduating class. The follow-ups are to be conducted by mail on an annual basis for a period of six years following high school graduation. By 1981 the design calls for follow-ups of six different panels—samples from the high school classes of 1975 through 1980; the follow-up questionnaires will be mailed to respondents from the high school classes sampled during the preceding six years.

Subsamples for Follow-ups. Given the considerable cost and staff effort involved in conducting follow-up surveys--particularly when up to six previous classes are to be followed--we decided to select only a subsample of each original class sample for inclusion in the follow-up panel. For subsampling purposes, the respondents from each year's senior class are divided into two strata. The first stratum consists of all individuals whose questionnaire responses indicate that they used marihuana on twenty or more occasions during the past month, i.e., on nearly a daily basis, or used some other illicit drug(s) at least once during the month prior to the senior year data collection. (Between 15 percent and 20 percent of the total base-year sample falls into this stratum.) About 30 percent of these individuals are included in the follow-up data collection. The other stratum consists of all other respondents. About 10 percent of them are included in the follow-up data collections.

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*The follow-up design and procedures were modified extensively after the 1977 data collection. This section describes the new approach. In 1976 and 1977 follow-ups, larger numbers of individuals were invited to participate and no payment was used; but the response rates were about 65 percent in the first year of follow-up and still lower in the second year. These rates were judged by the investigators to be inadequate, so more intensive procedures were developed for use on smaller samples.

The rationale for over-sampling drug users, as defined in the first stratum, is two-fold. First, the study is designed to monitor drug use, and this is by far the single most important area of research treated in the project. Second, the proportions of the age group using each of the illicit drugs other than marihuana are sufficiently low that over-sampling is needed to produce enough cases for detailed analysis. The same is true for daily marihuana users.

The process of subsampling within each stratum is carried out using a random procedure in which the probability of any individual being selected for follow-up is proportional to his/her base-year sampling weight. As we noted earlier, the base-year sampling procedure is such that sampling weights are necessary. In particular, the fact that our data collection may include as many as 400 seniors per high school means that some schools are represented by nearly 400 students, whereas other smaller schools may be represented by only 100 or fewer. The result is that students from small schools are likely to have higher weights (i.e., be counted more heavily) than students from larger schools. This variation in sampling weights arises from administrative needs in the base-year data collection; but for the follow-up data collections it is much more efficient to have essentially equal weights. By subsampling with probability of selection proportional to base-year sampling weight, we end up with follow-up weights that are equal for virtually all respondents within each stratum. (To adjust for the over-sampling, follow-up respondents in the "drug use" stratum have weights one-third the size of the weights of those in the second stratum.)

A more detailed discussion of the method for drawing the follow-up subsample is presented in Appendix A, along with some examples. Also illustrated there are the methods and rationale for generating the follow-up sampling weights.

The subsampling procedures described above are applied to each graduating class, thereby producing the target sample for a longitudinal panel which will then be involved in six annual follow-up data collections. Each such target sample is then split into two equal halves (cutting across both the strata discussed above and all base-year schools). Respondents in one half are asked to complete follow-up questionnaires on the first, third, and fifth years after graduation; those in the other half are asked to do so on the second, fourth, and sixth years after graduation. This strategy, which is illustrated in Figure 2, permits us to have twice as many respondents from a given class as we would if we returned to the same individuals all six times. The biannual, rather than annual participation also reduces the burden on any one respondent. However, the use of these follow-ups still provides enough detail on each participant to permit fairly detailed longitudinal analysis. Finally, the fact that half the follow-up respondents from any class are surveyed one year, and the other half are surveyed the next, means that we retain the capability of doing detailed trend analyses on an annual basis.

Follow-up Procedures. The follow-up procedures consist largely of a series of mailings. The first item is a newsletter mailed in December, which describes some of the project findings for that year and also announces that there will be a follow-up data collection in a few months. Included with the newsletter is a card asking the respondent to indicate any change of address or (in the case of women who marry) change of name. This mailing thus serves three distinct purposes: (a) it gives all the respondents some feedback from the earlier data collection; (b) it announces the forthcoming data collection to potential participants; and (c) it provides an occasion for updating the file of names and addresses.

Figure 2. TARGET SAMPLES FOR A GIVEN CLASS

Approximate Age	"Grade Level"	Approximate Number Targeted	Subsample Group	Number Targeted for Longitudinal Analysis
18	Senior year	18,000	A and B	2,400
19	1 yr. past H.S.	1,200	A	2,400
20	2 yr. past H.S.	1,200	B	
21	3 yr. past H.S.	1,200	A	2,400
22	4 yr. past H.S.	1,200	B	
23	5 yr. past H.S.	1,200	A	2,400
24	6 yr. past H.S.	1,200	B	

Example: High School Class of 1978 Follow-Up Schedule

Base-Year		Follow-Up Years					
1978	Subsampling process	1979	1980	1981	1982	1983	1984
18,000 → 2,400 →	1,200 (A)	1,200 →		1,200 →		1,200	
	1,200 (B)		1,200 →		1,200 →		1,200

The next mailing consists of the questionnaire used in the follow-up study, sent out in late March or early April. Enclosed with each questionnaire is a check for five dollars made out to the respondent. Return postage-paid mailing envelopes are provided, and an address correction form is attached to the back of the questionnaire. The mailing label containing the respondent's name and address is affixed to the form (and is visible through a window in the original mailing envelope); respondents are asked to separate the form from the questionnaire (leaving only a code number to identify the questionnaire).

Respondents are asked to correct any errors in the mailing label, provide information on any change in their names or addresses, and then mail the card back separately. This procedure of having a name and address card that is separated from the questionnaire is closely parallel to the procedure used in the base-year data collection, and is designed to provide the same high degree of confidentiality.

Within a week after the initial mailing of questionnaires, postcards are sent to all target respondents. The message is a word of thanks to those who already have completed their questionnaires, plus a reminder to the rest that the questionnaires are very important to us and that we hope for an early response.

The next steps in the process are contingent upon receipt or non-receipt of a completed questionnaire. About two to three weeks after the initial questionnaire mailing, a letter is sent to all those who have not yet responded indicating that we have not received the questionnaire and urging them to complete and return it as soon as possible. About two weeks later an attempt is made to telephone all those who still have not responded. Finally, several weeks later, thank-you letters are sent to all who completed the follow-up questionnaire.

For the 1978 follow-up of the subsample from the classes of 1975, 1976, and 1977, the overall response rate exceeded 80 percent. For the class of 1977, the response rate was 85.8 percent. We consider this to be a high rate of success for a mailed questionnaire. Accordingly, we plan to follow basically the same follow-up procedures in future years.

MEASURES

Overview and Conceptual Framework

Our measures focus on a wide range of behaviors, social values, experiences, plans, concerns, and general lifestyle orientations. The base-year questionnaire items are kept largely unchanged from year to year, thus permitting us to compare different graduating classes in their responses to the same questions. (However, some sections are used for the inclusion of variables which are measured on a more intermittent basis.) Similarly, much of the questionnaire content used in the follow-up is kept identical to the base-year content to permit an assessment of longitudinal change.

Of course, we are interested not only in assessing the amount of change but also in learning about the causes of changes and whether there is differential change among different subgroups of individuals. It is essential, therefore, that our measures not be limited just to the attitudinal and behavioral dimensions we are

interested in monitoring, but that they include background and demographic variables as well as important post-high school experience and environmental characteristics.

We have found it useful to distinguish four broad areas of measurement content:

"Monitored" attitudes and behaviors (repeated in base-year and follow-up data collections);

Background and demographic characteristics (measured in base-year only);

High school experiences, role behaviors, and satisfactions (measured in base-year only); and

Post-high school experiences, role behaviors, and satisfactions (measured in follow-up only).

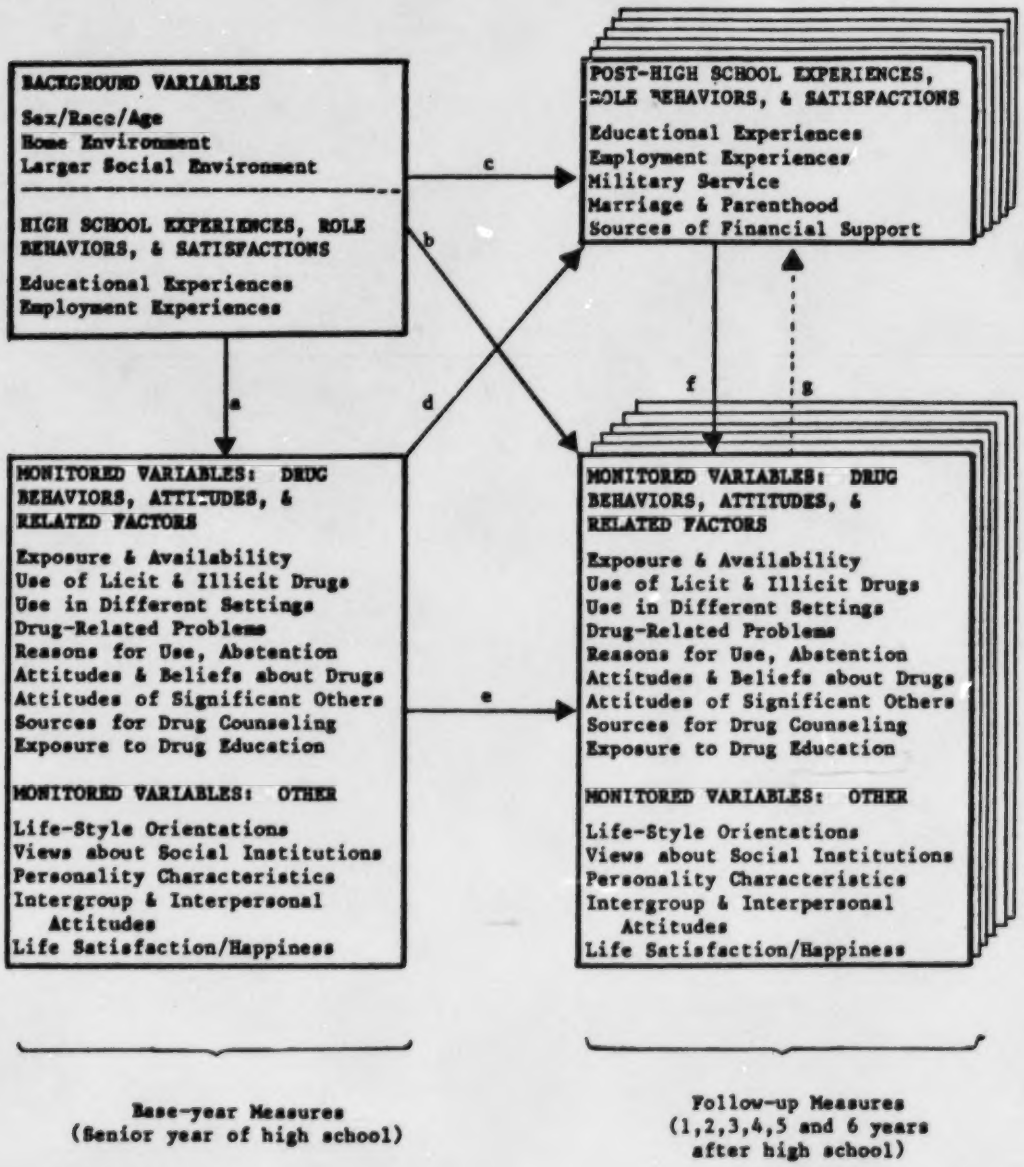
Figure 3 presents a schematic representation of these four areas of measurement. Note that the lower boxes on both the left and right sides of the figure are identical in content, representing the fact that the monitored variables are included in both base-year and follow-up questionnaires.

The arrows shown in Figure 3 represent types of causal connections that can be explored using the data we are collecting from any one class or cohort. We assume that background and demographic variables will have an impact on the monitored variables measured in both the base-year and follow-up data collections (as shown by arrows a and b), and also upon post-high school experiences (arrow c). We expect that some of the attitudes and behaviors measured in the senior year of high school will predict (and perhaps be causes of) post-high school experiences (arrow d), and they also surely will be strong predictors of later responses to the same questions (arrow e). Arrow f denotes the important impact we expect post-high school experiences to have on some of the attitudes and behaviors we monitor, but we also acknowledge (with arrow g) that in some instances the causal direction may be largely in the opposite direction. This conceptual framework is not a detailed recipe for relational analyses, but it indicates simply the classes of relationships that can be examined within the longitudinal panels created for each senior class. Not shown in Figure 3 are the relational analyses which can be conducted using some of the monitored variables to explain other monitored variables (e.g., relating lifestyle orientations to various patterns of drug use) or the cross-cohort analyses discussed earlier.

Outline of Questionnaire Content

It is beyond the scope and purposes of this report to present a detailed listing of questionnaire content which appropriately would be classified into each of the categories in Figure 3. Instead, we present in Table 1 a somewhat more detailed outline of the major content areas. The table is organized according to the several areas of measurement content introduced above. A few general comments about each of these areas are offered below:

Figure 3. CONCEPTUAL FRAMEWORK FOR MEASUREMENT AND ANALYSIS OF DATA DERIVED FROM A SINGLE COHORT



Monitored Variables: Drug Behaviors and Drug Attitudes. The measures of drug use and attitudes lie at the center of this system of monitoring. (They represent about 40 percent of the total space available in the base-year and follow-up questionnaires.) As Table 1 indicates, the measures include use of both licit and illicit substances, attitudes about use, and related information. The key drug use measures are presented in Appendix C; a number of other measures dealing with attitudes, perceptions, and beliefs about drugs are included elsewhere in the questionnaires.

Monitored Variables: Other Relevant Social Values, Attitudes, and Behaviors. The other variables that are monitored cover views about personal life-styles, confidence in social institutions, intergroup and interpersonal attitudes, and additional social and ethical issues. (Taken together, these variables comprise roughly another 40 percent of total questionnaire space.) All of these dimensions are related to the changing life experiences of young adults in America, and many have been shown to relate—directly or indirectly—to changing patterns of drug use (Suchman, 1968; Clark and Levine, 1971; Groves, 1973; Johnston, 1973b; and others).

It is not possible, nor would it be appropriate, to devote the same level of data collection effort to each of these areas as we devote to drug use and attitudes. Our strategy has been to make use of multiple questionnaire forms in which basic drug use measures are included for all respondents, but the other monitored topics (including attitudes, beliefs, and perceptions about drugs) are spread out among five different subsamples. The net effect of this strategy is to permit a much more extensive measurement of the drug variables and the non-drug variables than would otherwise be feasible.

Background Variables. A number of background dimensions are measured in the initial data collection, including sex, race, age, parental education (an indicator of socioeconomic level), region, and urbanicity. The measures of these dimensions are presented in Appendix D.

High School Experiences, Role Behaviors, and Satisfactions. A number of measures of school performance and adjustment are included here, since our own earlier research has demonstrated their connection with the use of illegal drugs and with other delinquent behavior (Bachman, 1970; Bachman et al., 1971; Johnston, 1973b; Bachman et al., 1978; Johnston et al., 1978).

Post-High School Experiences, Role Behaviors, and Satisfactions. Social environments such as college, military service, or civilian employment all are known to be linked to patterns of drug use and attitudes (Johnston, 1973b; O'Donnell et al., 1976; Bachman, O'Malley, & Johnston, 1978). It seems likely that such areas of post-high school experiences will continue to influence, and be influenced by, drug use and attitudes--although there is little reason to suppose that the patterns of relationship will remain unchanged throughout the seventies and beyond. Thus, for each of the areas noted above, we measure key experiences during the six years following high school. The same is true for the role transitions of marriage and parenthood--the effects of which are less well understood at the present time. Appendix E presents the measurement section common to all follow-up forms which includes a number of the posthigh school experiences and attainments of our respondents.

Table 1. MEASUREMENT CONTENT

MONITORED VARIABLES: DRUG BEHAVIORS, ATTITUDES, & RELATED FACTORS

EXPOSURE AND AVAILABILITY (for various drugs)

- Exposure to people who were using
- Proportion of friends using
- Perceived availability

USE OF LICIT AND ILLICIT DRUGS (13 classes)

- Monthly prevalence and frequency of use
- Annual prevalence and frequency of use
- Lifetime prevalence and frequency of use
- Indirect measures of quantity used per occasion
- Mode of administration (selected drugs)
- Patterns of multiple drug use: concurrent
- Patterns of multiple drug use: not concurrent
- Age at first use
- Attempts to quit
- Felt need to quit or cut back
- Expected future use

- Prescribed use of psychotherapeutic drugs
- Use of over-the-counter psychoactives (4 classes)

FREQUENCY OF USE IN DIFFERENT SETTINGS (various drugs)

- While alone
- With a few friends
- At parties
- With spouse/date
- With adults
- At home
- At school
- In a car
- During the daytime

DRUG-RELATED PROBLEMS (various drugs)

- Checklist of 15 problems
- Having "bad trips"
- Auto accidents and violations under the influence

REASONS FOR USE, ABSTENTION, AND TERMINATION OF USE (various drugs)

Table 1. MEASUREMENT CONTENT (cont.)

ATTITUDES AND BELIEFS REGARDING THE USE OF VARIOUS DRUGS

- Personal disapproval
- Perceived harmfulness
- Social connotations attached to use
- Attitudes regarding use by own children
- Preferred legal status (various drugs)
- Preferences on marihuana decriminalization

ATTITUDES OF SIGNIFICANT OTHERS (regarding various drugs)

- Parental awareness of use
- Perceived parental disapproval of use
- Perceived friends' disapproval of use
- Perceived status attached to use in the school
- Perceived social connotations of use by respondent's acquaintances

DRUG COUNSELING: RATING OF VARIOUS HELPGIVING SOURCES

EXPOSURE TO DRUG EDUCATION

- Types
- Rated helpfulness
- Effect on use

MONITORED VARIABLES: OTHER

LIFE-STYLE VALUES, ATTITUDES AND BEHAVIORS

- Educational values, preferences, expectations, and experiences
- Vocational values, occupational aspirations and experiences
- Family structure, marriage, and sex role preferences and experiences
- Material life-style and aspirations
- Patterns of recreational and leisure behavior
- Religious practices and views
- Political participation and views
- Views on family planning and population
- Views on conservation and pollution control
- Distributive equity: Concepts of equity and sharing of resources
- Concern with social problems facing the nation
- Values, attitudes and expectations about social change

VIEWS ABOUT SOCIAL INSTITUTIONS

- Educational system and its opportunities
- Economic system and its opportunities
- Government and political leadership
- Military system
- Other social institutions

Table 1. MEASUREMENT CONTENT (cont.)

PERSONALITY CHARACTERISTICS

- Self-esteem
- Internal control (locus of control)

INTERGROUP AND INTERPERSONAL ATTITUDES

- Race relations
- Inter-generational relations
- Radius of concern for other people

DELINQUENT BEHAVIOR

- Theft and vandalism
- Interpersonal aggression

VICTIMIZATION

LIFE SATISFACTION/HAPPINESS

- Global satisfaction
- Specific satisfactions (13 domains)

BACKGROUND VARIABLES
(Base-year data collection only)

PERSON CHARACTERISTICS

- Sex
- Race
- Age

HOME ENVIRONMENT

- Parental education
- Household composition

LARGER SOCIAL ENVIRONMENT

- Region
- Urbanicity (senior year)
- Urbanicity while growing up

Table 1. MEASUREMENT CONTENT (cont.)

HIGH SCHOOL EXPERIENCES, ROLE BEHAVIORS, AND SATISFACTIONS
(Base-year data collection only)

EDUCATIONAL EXPERIENCES

- Grades in high school
- Self-concept of intelligence and school ability
- Curriculum
- Satisfaction with high school experiences
- Absenteeism
- Perceptions of school characteristics
- Selected school characteristics (derived from aggregated data)
- Victimization in school

EMPLOYMENT EXPERIENCES

- Pay
- Hours worked

POST-HIGH SCHOOL EXPERIENCES, ROLE BEHAVIORS, AND SATISFACTIONS
(Follow-up data collection only)

EDUCATIONAL EXPERIENCES

- College attendance
- Academic performance (grades)
- Field of study (academic major)
- Satisfaction with educational attainment/experience

EMPLOYMENT EXPERIENCES

- Pay
- Type and status of job
- Organizational setting
- Unemployment experiences
- Job satisfaction

MILITARY SERVICE

MARRIAGE AND PARENTHOOD

- Marital status
- Number (and ages) of children
- Satisfactions

SOURCES OF FINANCIAL SUPPORT

Questionnaire Organization and Format

Five Different Questionnaire Forms. There are actually five different questionnaire forms for both base-year and follow-up data collections. The use of multiple forms is made possible by the fact that we survey a large number of high school seniors in each base-year data collection; it is made desirable by the fact that we wish to monitor a good many more variables than can be covered in a single questionnaire requiring only one class period to complete. (One major advantage of keeping the administration within the confines of a single class period is that the disruption of the school's schedule is minimized; thus, a higher proportion of schools are willing to participate. Secondly, a 45 to 50 minute questionnaire has a better chance of maintaining respondent involvement than a longer one, particularly during the follow-up phase.)

It is not necessary for our present purposes to review the differences from one questionnaire form to another, except to note that Form 1 deals in greater detail with drug use and reasons for drug use than any of the remaining forms. Because these detailed questions about drugs require more space than most other questions, Form 1 requires more pages than the other forms (but generally does not take longer to complete). Forms 2 through 5, both base-year and follow-up, are 12 pages long; the base-year version of Form 1 is 20 pages and the follow-up version is 16 pages.

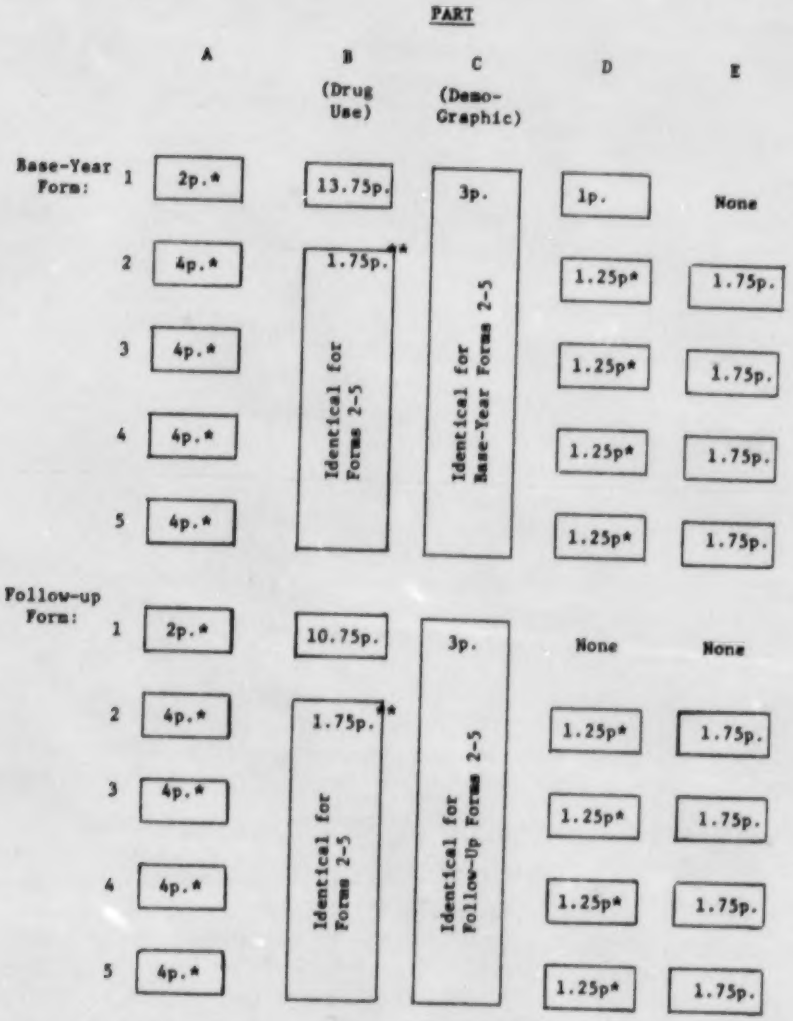
Forms 2 through 5 all have five "parts" (Part A through Part E); and the format is basically the same for each of these forms, both base-year and follow-up. Form 1 base-year has four parts and Form 1 follow-up has three parts. An overview of the several parts of the base-year and follow-up versions of each questionnaire is presented in Figure 4; it will be helpful in guiding our discussion.

Matching Base-Year and Follow-up Questionnaires. One point that must be kept in mind is that follow-up respondents always receive the follow-up form which matches their base-year form. Thus, for example, those who complete Form 1 of the base-year questionnaire will, if selected for follow-up, always receive the Form 1 follow-up questionnaire. The same is true for each of the other forms. This matching is crucial for longitudinal analysis of change, since it means that the questions which are repeated from one year to another are answered by the same respondents.

As Figure 4 indicates, the amount of material from each base-year form which is repeated in the corresponding follow-up form is quite substantial. Part A of each form is identical in base-year and follow-up versions, and the same is true for Part D (except for Form 1). Moreover, in Form 2 through 5 the base-year and follow-up versions of Part B (drug use measures) are identical except for one question. (The B section of Form 1 provides an extended treatment of drug use; the follow-up version is in most respects identical to the base-year version except that some questions are omitted in the follow-up.) The material in Part C emphasizes background and other demographic data in the base-year version, while in the follow-up version there is more stress placed on current activities and events of the past year. Nevertheless, even in this section there are quite a number of items that are identical or closely parallel for the base-year and follow-up versions. Part E in Forms 2 through 5 is reserved for material which may be different in base-year and follow-up versions; yet even in this section it has often proven useful to have identical questions in both versions. In sum, the great majority of questions in each form are identical in the base-year and follow-up versions.

BEST COPY AVAILABLE

Figure 4. OVERVIEW OF QUESTIONNAIRE FORMATS



* This section is identical in the base-year and follow-up forms of the same number. For example, Section A in Form 1 in the follow-up is identical to Section A of Form 1 in the base-year.

** This section is identical for base-year and follow-up except for one question.

Stability in Questionnaire Content from Year to Year. Another crucial factor for the analysis of change has already been implied in the discussion above; most of the questions in each form are unchanged from one year to the next. Thus, for example, while it is true that Part A of Form 2 was identical in the 1976 base-year and follow-up versions, it is also true that in the 1977 questionnaires Part A of Form 2 was identical to the 1976 version. Beginning with the 1976 data collection, there is little or no change from one year to the next in Parts A, B and C of each form of the questionnaire. Parts D and E, on the other hand, are subject to some change from year to year in order to introduce new items and also to be able to place some items, which seem well-suited to being monitored every two or three years rather than annually, onto a more intermittent schedule of measurement.*

Key Measures Appearing in All Forms. We have noted that the use of five different forms permits a substantial increase in the amount of material that can be covered in a fixed administration time. However, one limitation of this approach is that items which appear in different forms cannot be related to each other directly in analyses. For many of the measures that are being monitored, this does not represent a serious problem. On the other hand, there are certain key demographic and experiential dimensions that seemed essential to include in all forms. These are covered in Part C, which is identical across all questionnaire forms (with some differences between the base-year and follow-up versions). It is also important that drug use data be collected for all respondents, first because much of the drug use that is monitored is relatively rare and thus requires larger numbers of respondents, and also because a central purpose of the study is to relate the drug use measures to all other measures in the several questionnaire forms. Accordingly, the drug use segment (Part B) is identical in Forms 2 through 5 (and also identical for base-year and follow-up versions except for a single item). Moreover, the more extensive drug usage section in Form 1 includes a counterpart to each of the drug usage items in Forms 2 through 5.

Summary of Questionnaire Format Design and Rationale. In order to cover a broader range of topics, the Monitoring the Future study uses five different questionnaire forms. All respondents selected for longitudinal study are sent follow-up questionnaire forms that match their base-year forms. Thus, in effect, we can think of starting five parallel longitudinal panels each year, corresponding to Forms 1 through 5. Large portions of each questionnaire form are designed to remain constant from one year to another, and also to appear in both base-year and follow-up versions. This continuity makes possible a detailed monitoring of change on an annual basis. However, provision is also made for some content revision from year to year in the last two sections of each form, thus permitting new measurement

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*The 1975 data collection was the first for the project and thus involved only base-year questionnaires. There were several exceptions to the formatting described here. There were only three parts—Part A in 1975 was similar to the current Part A, Part B in 1975 included nearly the same material as appears in the current Parts B and C, and Part C in 1975 included materials similar to that in the current Parts D and E. The questionnaires in 1975 were four pages longer than the current versions and involved more duplication of items across forms. After the first year of experience, it became clear that the questionnaires required some shortening. In effect, the questionnaires beginning with 1976 are somewhat reduced in length from the 1975 versions, but most of the current items appeared also in 1975. Thus, in spite of the revision and refinement in formatting, most the current items permit trend analyses going back to 1975.

topics to be introduced and others to be monitored on two-year or three-year cycles. Key background and experience measures, including measures of drug use, are covered by identical questions in all five forms.

The great advantage of the use of multiple forms is the possibilities for expanded measurement coverage. A corollary advantage is that a number of similar questions can be spread across several forms without causing the problems of redundancy that they would introduce if all placed in a single form. Responses to survey questions are notoriously susceptible to the particular wordings employed, and sometimes subtle differences in question statements can lead to substantially different response patterns. Therefore, in some content areas alternative question wordings have been used in different forms, thus making it possible to determine whether trends and relationships are essentially the same across the several versions.

The use of multiple forms has, of course, added some complexities to the process of questionnaire design and survey administration. However, we have tried to design the questionnaires so as to minimize these, and we feel that the benefits are well worth the costs.

Representativeness and Validity*

The samples for this study are intended to be representative of high school seniors throughout the States. We have already discussed the fact that this definition of the sample excludes one important portion of the age cohort: those who have dropped out of high school before nearing the end of the senior year. But given the specific aim of representing high school seniors, it will now be useful to consider the extent to which the obtained samples of schools and students are likely to be representative of all seniors, and the degree to which the data obtained are likely to be valid.

We can distinguish at least four ways in which survey data of this sort might fall short of being fully accurate: (1) some sampled schools refuse to participate, which could introduce some bias; (2) the failure to obtain questionnaire data from 100 percent of the students sampled in participating schools could also introduce bias; (3) the answers provided by participating students are open to both conscious and unconscious distortions, which could reduce validity; and (4) limitations in sample size and/or design place limits on the accuracy of estimates. The effects of this last factor can be estimated statistically, and several illustrations are provided later. The possible effects of the other three factors, however, are not amenable to such precise quantifications; instead, we must rely on informed judgement. In the following sections we discuss and offer our judgments on each, elaborating on the facts which underlie our inferences.

School Participation. As we noted earlier, each school is asked to participate for two years; therefore, a new half-sample (about 65 schools) is recruited each year. When a school is unwilling or for some reason unable to participate, a substitute school is selected to match the originally sampled school in terms of geographic composition, size, and racial composition. Our most recent experience

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*This section of the paper is adapted from an earlier report (Johnston, Bachman, & O'Malley, 1977). We acknowledge with gratitude the substantial contribution made by Patrick O'Malley to this section.

involves schools contacted in the fall of 1977 and asked to participate in the 1978 and 1979 data collections. Eighty percent of those contacted agreed to participate and actually did. (In addition, 98 percent of the schools which first participated in 1977 agreed to their second year of participation in 1978.)

Securing the cooperation of selected schools is often a long and arduous process. No school is an isolated unit; each is part of a larger local school district or system. Frequently, approval for a school's participation in the survey is required from some official in addition to the principal of the selected school. In some cases this is the superintendent or, particularly in the larger systems, an official whose approval is required for all research conducted in the system.

Complicating the process is the fact that considerable variation exists in the local laws governing research conducted in schools. In some cases, parental consent must be obtained. School boards, teacher associations, and parent associations all may have a voice in whether or not a school participates.

Efforts to secure cooperation entail letters, telephone calls, and occasionally a personal visit from some member of the survey staff. Most of this personal contact is now being carried out by University of Michigan doctoral students who have had previous experience themselves in school administration, either as superintendents, principals, or other high level administrators.

The standard procedure involves an initial telephone contact with the principal of a selected school after s/he has received a letter of invitation. Many of the refusals come at this point. The reasons most commonly given are that the school objects to using student time for surveys, that the school has already participated in too many surveys that year, that there is some temporary crisis or disruption in the system that year (mandatory integration, a teacher strike, budgetary difficulties), that the necessary people will not approve the survey due to its content, or that they fear adverse parental reaction to a survey dealing with social issues. Often a principal will want, or be required, to obtain approval from another source even if the principal favors participation. The reasons given for refusal at these higher levels tend to be the same as those listed above.

It should be remembered that there is no concrete incentive or reward for a school's participation, other than a promise of future reports from the study. Therefore, the major motivation for most administrators is their desire to contribute to the goals of the research. Given the obstacles of the type listed above which arise from time to time in particular schools, it is not surprising that some decline to participate each year.

Though somewhat of an aside, it may be useful to compare the participation rates obtained in this study with other studies of similar populations. The most comparable study was performed for the National Institute on Alcohol Abuse and Alcoholism (Rachal et al., 1975). This national study of drinking behavior among youth sampled classrooms from Grades 7 through 12 for questionnaire administrations in the spring of 1974 in a large (unspecified) number of schools. The researchers were able to obtain cooperation from 68% of the original classrooms, so presumably the school participation rates were about the same. This figure compares to an average school participation rate of 74 percent for the present study (1975 through 1978).

Another large national study is the National Longitudinal Study of the High School Class of 1972. This study, which did not contain questions about drug use, obtained cooperation from 80% of the initially sampled schools (Fetters, 1975). The Youth in Transition Study samples of high school students, conducted at the Institute for Social Research in 1966, obtained a school participation rate of 81% (Bachman, 1970). Finally, the congressionally mandated Equality of Educational Opportunity study, conducted in 1965, obtained pupil questionnaires and tests from no more than 67% of the sampled high schools (Coleman et al., 1966).

Given the sensitive nature of the questions in the present study, and the increased conservatism of school administrators concerning research (because of the new, poorly understood privacy laws), we feel that the present participation rates are about as good as can be managed in a survey of this type.

It is reasonable to ask whether nonparticipation of some of the originally sampled schools is likely to have a significant effect on the findings. Insofar as population estimates are concerned, the answer depends on two factors: the size of the refusal rate and the similarity of the substitute schools to the original schools they are replacing. With respect to the first factor, we expect that about one-fifth of the schools will be substitutes during any given year. With respect to the second factor, the substitutes are chosen to be similar as possible to the original school. There is no particular reason to expect that the students in schools which refuse are greatly different from those in schools which agree to participate. The reasons for school nonparticipation are based primarily on general policy issues and/or on somewhat happenstance events which are not likely to relate systematically to student drug use. In sum, the school refusal rate is not excessively high compared with other school-based studies, and the substitute schools seem likely to be quite similar to the refusal schools.

There is one additional point to be considered. Insofar as monitoring change is concerned, the effects of school nonparticipation should be minimal. Any systematic biases that might emerge (say, underrepresenting politically conservative districts) should be approximately replicated from year to year, so the trend data should accurately reflect any major changes which might be occurring. A partial check on the adequacy of the sample of schools is to compare trend data based on the total sample with trend data based only on the half-sample which remains constant from one year to the next. Since this half-sample consists of the same set of schools, the trends cannot be affected by schools' participation or refusal. We examined drug use trend estimates for 1975 and 1976, comparing the data from all schools with the data from only the constant half-sample. These estimates were extremely similar, suggesting that any errors due to sampling of schools is constant.

Student Participation. We are now obtaining useable questionnaires from over 80% of the seniors in our target sample (a figure which, incidentally, compares favorably with most national household surveys these days). While a very few (under 2%) explicitly refuse to complete the questionnaires, most of the non-respondents are absent from school on the day of the administration. (Absentee rates tend to be higher than average in the last third of senior year due to several factors, particularly a higher frequency of extracurricular activities.) Because only one survey administration is conducted in each school (except in cases where the participation rate is less than 70%), students who are absent from class on that day

are excluded. Since students with higher absentee rates tend to have higher than average rates of drug use (Kandel, 1975), missing them is likely to have some effect on drug use estimates.

It is possible to use the absenteeism records of actual respondents in adjusting drug use estimates to correct for absenteeism. The logic of the adjustment is as follows. A student's probability of being administered the questionnaire is inversely proportional to his or her absentee rate. For example, students who are absent about half the time have only a 50% chance of being present on the survey day; but assuming that on any given day a random half of such students are present, their data can be double-weighted to represent the random half who are absent. One need only determine the probability that students who are present on the survey day would be present on any given day, which can be done by asking how many days during the past 20 days (for example) the student was absent. Each student's data can then be weighted by a factor equal to 20/(20 minus the number of days absent). Thus, a student absent zero days would have a weight equal to 1, and a student absent the maximum of 19 days would have a weight equal to 20.

While this method of adjusting for absenteeism has some appeal, we have thus far elected not to incorporate the correction into the data we report. There are several reasons for this decision. First, after we made such adjustments to the drug usage rates using the data on absenteeism, we found that the adjusted figures were only slightly higher than the unadjusted ones. (For example, overall prevalence figures were usually increased by only one-half to two percent for the various drugs.) The complexity of computing adjusted data did not seem to be justified by such slight changes. Second, the very disparate weights created by this adjustment substantially increase the sampling variance (Kish, 1965, p. 560). Finally, as has been pointed out earlier, this study focuses on trends, and any systematic, consistent errors are not likely to affect trend data. Thus, we conclude that the effects of student nonparticipation on drug usage estimates are minimal and not worth the cost and difficulty of correction.

Validity of Self-Report Data. A basic question in all survey work is the extent to which to believe what respondents say; in this case we are especially concerned with what they say about their use of drugs. While there is no direct, objective validation of our self-report measures, a good deal of inferential evidence exists to support their validity:

1. A considerable proportion of respondents, over 60%, admit to some illegal use of drugs.

2. There are some rather substantial and predictable relationships between self-reported drug use and other items dealing with attitudes about drug use, and with behaviors such as academic performance, delinquency, and the self-reported use of licit drugs (Johnston, 1973b; Johnston et al., 1978). In other words, there is considerable empirical evidence of construct validity.

3. The missing data rates on the drug use questions are just about normal for that point in the questionnaire, even though respondents specifically are instructed to leave blank any questions they feel they cannot answer

honestly. For all drugs except marihuana, the rate of missing data runs between 2.5% and 3.0%, while the average amount of missing data for the preceding questions runs between 1.8% and 2.2%. For marihuana the missing data rate in 1977 is 4.5%, suggesting rather slight underreporting by intentional skipping of questions.

4. Although the longitudinal design of the present study precludes our providing absolute anonymity to respondents, anonymity has appeared to make little difference in self-reported drug use. Other investigators have compared groups differing in degree of anonymity and found little or no difference in self-reports (Haberman et al., 1972; Leutgert & Armstrong, 1973).

5. A number of methodological studies (e.g., Petzel, Johnson, & McKillip, 1973) have included fictitious drugs in survey questionnaires. These fictitious drugs have shown very low levels of reported use, indicating that intentional overreporting is likely to be minimal.

6. Studies employing other data collection methods have shown similar prevalence rates of drug use for the same age group (Abelson & Atkinson, 1975; Abelson & Fishburne, 1976; Abelson, Fishburne, & Cisin, 1977; and O'Donnell et al., 1976).

7. Methodological studies have utilized various methods to determine the validity of self-report data: urinalysis for drug use; polygraph verification; official police, court, and treatment agency documents; and reports by peers, parents, and teachers. Generally, the findings from these studies have been encouraging (see, for example, Amsel et al., 1976; Bonito et al., 1976). Gold has reviewed the literature on self-reported delinquent behavior of adolescents and concluded that "the best single measure of delinquent behavior available is self-report of delinquency, and (that)... it is accurate enough for use in rigorous research designs and with sophisticated statistics" (1977).

While there is almost certainly some degree of underreporting of illicit drug use on self-report surveys, we feel that it is far less than most people intuitively assume. Further, for purposes of monitoring trends across time, a fairly constant degree of underreporting should have almost no effect on trend estimates. (For a further discussion of this latter point, see Johnston, 1977.)

Accuracy of the Sample. The errors possible in an estimate based on a sample survey can be classified into two categories--sampling and nonsampling. Having just discussed three possible sources of nonsampling errors, we will now focus on sampling error. Sampling error occurs because observations are made on only a sample rather than the entire population under study. There are roughly three million seniors located in more than twenty thousand high schools throughout the coterminous United States. Our samples of about 18,000 seniors clustered in about 125 to 130 schools can provide close, but less than perfect, estimates of the reponses that would be obtained if all schools and all seniors were asked to particpate.

One cannot know for any particular statistic exactly how much error has resulted from sampling; however, one can make reasonably good estimates of confidence intervals, or ranges within which the value would be likely to fall if all schools and all seniors were invited to participate, rather than using only samples of

seniors in samples of schools. In a recent report of drug use in the classes of 1975, 1976, and 1977 (Johnston, Bachman, & O'Malley, 1977, Appendix B), we provided detailed tables of confidence intervals for percentages based on the total samples and various subgroups, taking into account that sampling errors differ depending on the drug involved (since clustering by schools differs from one drug to another), the size of the percentage, and whether comparisons among groups or trends across time are involved.

For purposes of this report, it is sufficient to note that no confidence intervals for the total sample in 1977, or for trends from 1976 to 1977, exceed a value of $\pm$ 2.5 percentage points. The great majority of confidence intervals are considerably smaller. These levels of accuracy mean that an increase in annual prevalence of marihuana use from 44.5 percent for the class of 1976 to 47.6 percent for the class of 1977 is statistically significant ($p < .01$); it also means that the much smaller increases in annual prevalence of cocaine use (from 6.0 percent to 7.2 percent) and use of opiates other than heroin (from 5.7 percent to 6.4 percent) are also statistically significant ($p < .01$ and $p < .05$, respectively). On the whole, we feel that these samples are providing a high level of accuracy, thus permitting the reliable detection of fairly small trends from one year to the next.

Consistency and the Measurement of Trends

We have noted at several points in the above discussion that the Monitoring the Future project is designed specifically to measure changes from one time to another. Accordingly, the measures and procedures have been standardized and applied consistently across each data collection. We have argued that to the extent that any biases remain because of limits in school and/or student participation, and to the extent that there are distortions (lack of validity) in the responses of some students, it seems very likely that such problems will exist in much the same way from one year to the next. In other words, biases in the survey estimates should tend to be consistent from one year to another, leaving the measurement of trends relatively unaffected by such biases.

The argument presented above may or may not seem plausible in the abstract; but it seems much more compelling when examined in the light of actual data from the first four surveys. Table 2 presents frequency of usage data for four drug classes. Two of these (amphetamines and tranquilizers) show great stability between 1975 and 1978, not only in the overall prevalence rates but also in the detailed frequency distributions. We would have been pleased to have gotten this much replication based on independent samples of the same population in the same year, let alone over four years from four different samples of different populations. Having discovered many stable results of this type, we are increasingly confident that the estimates are accurate and that observed changes—even relatively small ones—are real. The two other drugs included in Table 2 (marihuana and cocaine) help to illustrate this point. With these drugs we observe rather small but consistent changes on a year-to-year basis over a three-year interval. The fact that the direction of movement over two or more of these sequential time intervals is consistent is what provides the most reassurance that genuine trends are occurring. In all cases there is an orderliness from one year to the next which suggests a high level of precision and sensitivity to trends.

Table 2. EXAMPLES OF TRENDS IN DRUG USE
DURING THE PAST YEAR AMONG HIGH SCHOOL SENIORS,
CLASSES OF 1975 THROUGH 1978

USE DURING LAST 12 MONTHS	MARIHUANA				COCAINE				AMPHETAMINES				TRANQUILIZERS			
	1975	1976	1977	1978	1975	1976	1977	1978	1975	1976	1977	1978	1975	1976	1977	1978
No occasions	60.0	55.5	52.4	49.8*	94.4	94.0	92.8	91.0**	83.8	84.2	83.7	82.9	89.4	89.7	89.2	90.1
1-2 "	8.7	8.6	8.9	8.9	3.3	3.5	4.0	5.1	5.5	5.7	5.7	6.5	5.4	5.2	5.1	5.3
3-5 "	5.2	5.9	6.5	6.5	1.0	1.2	1.3	1.7	2.8	2.9	3.2	3.4	2.2	2.2	1.9	2.1
6-9 "	4.3	4.7	5.1	5.4	0.6	0.6	0.9	0.9	2.4	2.3	2.3	2.3	1.2	1.3	1.6	1.0
10-19 "	5.5	5.8	6.3	6.1	0.4	0.4	0.5	0.7	2.4	2.2	2.5	2.2	0.9	0.8	1.1	0.8
20-39 "	4.5	5.1	5.6	5.8	0.2	0.2	0.2	0.3	1.6	1.3	1.5	1.3	0.5	0.4	0.5	0.4
40 or more	11.7	14.3	15.1	17.5	0.2	0.1	0.2	0.3	1.5	1.4	1.2	1.3	0.4	0.4	0.5	0.3

*The proportion of 1978 seniors who used marihuana in the past year is significantly different from the proportions of 1977 seniors ($p < .05$), 1976 seniors ($p < .001$), and 1975 seniors ($p < .001$).

**The proportion of 1978 seniors who used cocaine in the past year is significantly different from the proportions of 1977, 1976, and 1975 seniors ($p < .001$ in all cases).

ANALYSIS STRATEGIES AND POSSIBILITIES

It does not seem useful in this paper to spell out the analysis techniques that are likely to be used in the Monitoring the Future project. Different analytic purposes will dictate different techniques, and it seems more appropriate to leave the discussion of such procedures for the time when they are actually employed. But it may be useful to offer a few observations about broad issues of analysis strategy and the need for multi-cohort longitudinal data.

We noted earlier that the study design will permit us to examine four kinds of trends: (1) changes from one graduating class to another; (2) secular trends across a particular period of time (without reference to age); (3) life cycle or maturational changes; (4) longitudinal changes reflecting the differential impact of various post-high school environments and experiences. The first three kinds of patterns can be discerned by using a variety of analysis techniques including ones as simple as plotting mean scores for the different cohorts across time; the fourth pattern requires only a separation into subgroups (corresponding to different patterns of environments and experiences). Certainly there will be ample opportunity for more complex forms of statistical analysis; and some of our earlier work illustrates the kinds of procedures to be used (e.g., Bachman & O'Malley, 1977; Johnston et al., 1978). Nevertheless, it is likely that many of the most interesting and important findings to come from this study will involve quite simple statistical procedures applied to an unusually rich data set.

The key to the richness of this data set is the fact that it grows out of a multi-cohort longitudinal design. Why is that form of design so important? One of the most convincing arguments is that social science data are subject to many interactions and extraneous factors, at least some of which are likely to change over time:

> Generalizations decay. At one time a conclusion describes the existing situation well, at a later time it accounts for rather little variance, and ultimately it is valid only as history. The half-life of an empirical proposition may be great or small. The more open a system, the shorter the half-life of relations within it are likely to be (Cronbach, 1975, pp. 122-123).

The kinds of topics studied in the Monitoring the Future project—drug use, lifestyles, values and attitudes about social institutions and social issues—have been subject to a great deal of change within the last five to ten years. That pattern seems likely to continue. The analysis problems posed by secular trends are particularly troublesome for any longitudinal study which follows a single cohort for some number of years. As several authors have pointed out (Buss, 1973; Schaie, 1965), the data from such a study do not permit a clear distinction between genuine maturational changes and those broad trends which affect society as a whole. The multi-cohort design of the present study will do much to avoid such problems.

Possible Analyses of School Effects

The great majority of the Monitoring the Future analyses will deal with total samples or with subgroups defined according to personal characteristics or experiences. However, the fact that the base-year samples are clustered in about

130 high schools opens up the possibility for analyses of systematic differences among schools. We are not optimistic about finding many such differences which could be interpreted as "school effects." Our own work on the Youth in Transition project (Johnston, 1973a; Bachman & O'Malley, 1977) is generally consistent with the lack of clear school effects reported in the extensive literature review by Averch et al. (1974) and also by Jencks and Brown (1975) in their recent analysis of Project Talent data.

Our pessimism about finding differential high school effects applies to a considerable range of "cognitive" and also "non-cognitive" variables that have been studied by educational researchers. Nevertheless, there may be several specific areas of attitudes and behaviors in which differential school effects exist and can be documented. One such area includes interracial attitudes and behaviors. An examination of school differences in racial attitudes, as related to school size and school racial composition, was recently carried out by a doctoral student using data from this study (Fairchild, 1977). Another promising area for analysis of school differences includes drug usage and attitudes. Johnston's (1973b) analysis of the Youth in Transition sample found higher levels of drug usage in larger schools—a relationship that was not diminished when community size was controlled. A replication and probably an extension of those analyses is likely to be undertaken with the Monitoring the Future data.

A Study of the Effects of Changes in Marihuana Laws

There has been much discussion about criminal penalties for the use and/or possession of marihuana. On the one hand, it has been argued that the present laws in most states are hypocritical because they apply unreasonably heavy penalties for the use of one substance (marihuana) while permitting use of another potentially more dangerous substance (alcohol), that they discriminate against the young, and that they divert a heavy proportion of law enforcement resources. On the other hand, it has been argued that legalization, or even decriminalization, of marihuana would lead to increased marihuana use, and perhaps increased use of other drugs.

Some states have changed their laws about marihuana, and others are about to do so. These law changes can be viewed as a group of "natural experiments." An assessment of the impact of these "experiments" on youth was not part of the original design of the Monitoring the Future project; however, such an assessment was anticipated in the design and later incorporated as a supplement to the project.

The unique advantage of the Monitoring the Future study for such research on the impact of marihuana law changes is that the survey of the high school class of 1975 provides "before" data obtained prior to the enactment of the law changes. This provides crucial base-line information against which to measure trends. Moreover, the data from the "parent project" provide rich possibilities for control or comparison groups against which to compare data from schools in "experimental" states.

The effects of other policy changes and intervention attempts in the future might also be assessed using the data from this ongoing series. One of the obstacles to such assessments in the past has been the absence of base line or "before" measures. With a full scale study in place, collecting broad epidemiological information on an ongoing basis, we may be able to avoid missing such important opportunities in the future.

APPENDIX A

SAMPLING PROCEDURES AND SAMPLING WEIGHTS FOR FOLLOW-UP SURVEYS

The method used for drawing a follow-up subsample from each sample of base-year respondents is described here, along with the methods for generating the sampling weights to be used in the analysis of the follow-up data. As has already been described in the text, the base year respondents are divided into two strata for follow-up sampling purposes—the "drug use" stratum and a second stratum of those people not in the drug use stratum. (The "drug use" stratum includes those who reported using marihuana on twenty or more occasions, or another illicit drug on one or more occasions, during the month prior to the base-year survey).* For the purposes of illustrating the method used to subsample for follow-up surveys, however, we will begin by ignoring the issue of stratification, i.e., we will for the moment act as if everyone falls into the "drug use" stratum.

In Table A, we provide six examples of schools, indicating their follow-up subsampling proportions and follow-up weights. The schools were selected not to be representative, but rather to illustrate the full range of sizes, weights, etc.

Perhaps the first point to be illustrated with Table A is the fact that the number of obtained respondents varies widely from one school to another (see column b). This variation is one of the factors determining the different sizes of the sampling weights (shown in column c), but it is by no means the only factor. The total contribution of each school to the base-year weighted sample is shown in column d.

Thus far we have been dealing only with the base-year sample; we have noted that there is some considerable variation in the contribution (base-year weighted total) from one school to another (e.g., school "E" contributes nearly four times as much as school "F", as shown in column d), and much greater variation in the contribution from one respondent to another (e.g., each respondent in school "F" contributes almost eight times as much as each respondent in school "C", as shown in column c). A much more efficient sample would give equal weight to each respondent (or at least each respondent within a given stratum), and that is what we set out to accomplish in the subsampling for follow-up purposes.

In effect, we decided that the follow-up subsample would be drawn in such a way that each respondent in the first, or "drug use," stratum would have a follow-up sample weight of 3.333. This was accomplished in virtually all schools by following the sort of procedure illustrated in Table A. In essence, we computed the total weighted contribution for each school, as shown in column d, and then determined how many target respondents with follow-up weights of 3.333 would be necessary to give us that same weighted contribution. The appropriate number of individuals was then selected by random procedures from among all base-year respondents in each school. Column e indicates the number of target respondents and column g shows their weighted contribution given their new weights of 3.333. As a comparison of columns d and g indicates, the schools would have virtually identical contributions to

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*Other illicit drug use includes the use of any of the following (except use under medical supervision): LSD, other psychedelics, cocaine, amphetamines, barbiturates, tranquilizers, heroin, other narcotics.

Table A. EXAMPLES OF SUBSAMPLING FOR FOLLOW-UP PANELS

(a) School	(b) Number of Respondents Obtained in Base-Year Sample	(c) Base-Year Individual Sample Weights	(d) Base-Year Weighted Total = b x c	(e) Target Number Selected for Follow-Up = $\frac{d}{3.333}$	(f) Follow-up Sample Weights	(g) Follow-up Weighted Total = e x f	(h) Probability of Selection for Follow-Up = $\frac{e}{b} \approx \frac{c}{3.333}$	
A	218	0.6090	132.8	40	3.333	133.3	.183	.183
B	144	1.2107	174.3	52	3.333	173.3	.361	.363
C	191	0.4183	79.9	24	3.333	80.0	.126	.126
D	78	1.4113	110.1	33	3.333	110.0	.423	.423
E	283	0.9360	264.9	79	3.333	263.3	.279	.281
F	22	3.2279	71.0	21	3.333	70.0	.955	.968

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the base-year weighted totals and to the follow-up weighted totals, provided that there were a perfect rate of response in the follow-up data collection. (In fact, of course, perfect follow-up response rates are not obtained, and the rates of follow-up response vary from one school to another; nevertheless, the procedure described here gives us a very efficient target sample.)

We stated earlier that for the purposes of this illustration we would ignore the matter of stratification and act as if everyone in the schools shown in Table A falls ito the "drug use" stratum. In fact, the actual subsampling procedure follows a similar sequence of steps. We select a follow-up subsample from each base-year school without reference to drug use, and all subsampled individuals are then designated as "candidates" for the follow-up sample. After the selection procedure described above, a separate pass through the data is made to identify members of the "drug use" stratum; all such individuals are included in the follow-up, with one half (randomly designated) invited to participate on the first, third, and fifth years after graduation, and the other half asked to participate on the second, fourth, and sixth year. All members of the drug stratum of the follow-up sample are assigned a follow-up weight of 3.333.

One-third of the remaining "candidates" for the follow-up sample, those in the second stratum, are selected (randomly) for follow-up; one sixth are scheduled for the first, third, and fifth years after graduation; one sixth are scheduled for the second, fourth, and sixth years. All selected members of the second stratum are assigned a follow-up weight of 10.0.

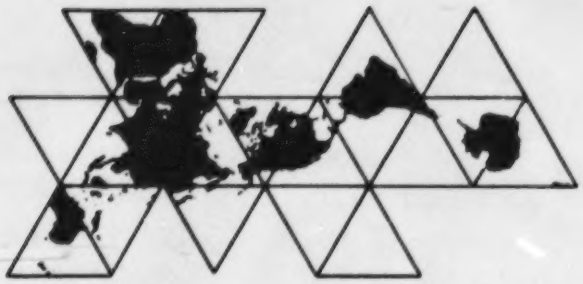
Summary

We have described the follow-up sampling procedure in some detail. As a summary, let us describe the resulting sample in the simplest terms. The follow-up sample includes two strata:

Stratum 1: Among base-year respondents indicating use of any illicit drug other than marihuana during the past 30 days, and/or 20 or more occasions of marihuana use during the past 30 days, a subset are selected within each school with probability proportionate to their base-year sampling weights divided by 3.333. Their resulting follow-up sampling weights are all set equal to 3.333.

Stratum 2: Among base-year respondents other than those falling into Stratum 1, a subset are selected within each school with probability proportionate to their base-year sampling weights divided by 10.0. The resulting follow-up sampling weight for these respondents is 10.0.

Half of those in each stratum are targeted for follow-up data collections one, three, and five years after high school graduation. The other half are scheduled for two, four, and six years post-graduation.



APPENDIX B

COVER OF BASE-YEAR QUESTIONNAIRE

monitoring the future

a continuing study of the lifestyles and values of youth

This questionnaire is part of a nationwide study of high school seniors, conducted each year by the University of Michigan's Institute for Social Research. The questions ask your opinions about a number of things--the way things are now and the way you think they ought to be in the future. In a sense, many of your answers on this questionnaire will count as "votes" on a wide range of important issues.

If this study is to be helpful, it is important that you answer each question as thoughtfully and frankly as possible. All your answers will be kept strictly confidential, and will never be seen by anyone who knows you.

This study is completely voluntary. If there is any question that you or your parents would find objectionable for any reason, just leave it blank.

In a few months, we would like to mail each of you a summary of the nationwide results from this study. Also, in about a year we would like to mail another questionnaire to some of you, asking about how your plans have worked out and what's happening in your lives.

In order to include you in these mailings, we ask for your name and address on a special form at the end of this questionnaire. This form is to be torn out and handed in separately. Once the address form and the questionnaire have been separated, there is no way they can be matched again, except by using a special computer tape at the University of Michigan. The only purpose for that tape is to match a follow-up questionnaire with this one.

Other seniors have said that these questionnaires are very interesting and that they enjoy filling them out. We hope you will too. Be sure to read the instructions on the other side of this cover page before you begin to answer. Thank you very much for being an important part of this project.

1978

INSTITUTE FOR SOCIAL RESEARCH
THE UNIVERSITY OF MICHIGAN
ANN ARBOR, MICHIGAN

APPENDIX C: DRUG MEASURES (Part B of Forms 2 through 5, Base Year and Follow-Up)

PART B

The following questions are about cigarette smoking.

1. **Have you ever smoked cigarettes?** *

① Never–GO TO QUESTION 3
② Once or twice
③ Occasionally but not regularly
④ Regularly in the past
⑤ Regularly now

*This is the base-year version. The follow-up version appears at the bottom of the next page.

2. **How frequently have you smoked cigarettes during the past 30 days?**

① Not at all
② Less than one cigarette per day
③ One to five cigarettes per day
④ About one-half pack per day
⑤ About one pack per day
⑥ About one and one-half packs per day
⑦ Two packs or more per day

3. **Next we want to ask you about drinking alcoholic beverages, including beer, wine, and liquor.**

Have you ever had any beer, wine, or liquor to drink?

① No–GO TO THE TOP OF THE NEXT COLUMN
② Yes

4. **On how many occasions have you had alcoholic beverages to drink...** (Mark one circle for each line.)

	0 Occasions	1-2 Occasions	3-5 Occasions	6-9 Occasions	10-19 Occasions	20-39 Occasions	40 or More
a. ...in your lifetime?	○	○	○	○	○	○	○
b. ...during the last 12 months?	○	○	○	○	○	○	○
c. ...during the last 30 days?	○	○	○	○	○	○	○

5. **On the occasions that you drink alcoholic beverages, how often do you drink enough to feel pretty high?**

① On none of the occasions
② On few of the occasions
③ On about half of the occasions
④ On most of the occasions
⑤ On nearly all of the occasions

6. **Think back over the LAST TWO WEEKS. How many times have you had five or more drinks in a row? (A "drink" is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)**

① None
② Once
③ Twice
④ Three to five times
⑤ Six to nine times
⑥ Ten or more times

The next major section of this questionnaire deals with various other drugs. There is a lot of talk these days about this subject, but very little accurate information. Therefore, we still have a lot to learn about the actual experiences and attitudes of people your age.

We hope that you can answer all questions; but if you find one which you feel you cannot answer honestly, we would prefer that you leave it blank.

Remember that your answers will be kept strictly confidential: they are never connected with your name or your class.

7. **On how many occasions (if any) have you used marijuana (grass, pot) or hashish (hash, hash oil)...** (Mark one circle for each line.)

	0 Occasions	1-2 Occasions	3-5 Occasions	6-9 Occasions	10-19 Occasions	20-39 Occasions	40 or More
a. ...in your lifetime?	○	○	○	○	○	○	○
b. ...during the last 12 months?	○	○	○	○	○	○	○
c. ...during the last 30 days?	○	○	○	○	○	○	○

8. **On how many occasions (if any) have you used LSD ("acid")...**

	0	1-2	3-5	6-9	10-19	20-39	40+
a. ...in your lifetime?	○	○	○	○	○	○	○
b. ...during the last 12 months?	○	○	○	○	○	○	○
c. ...during the last 30 days?	○	○	○	○	○	○	○

9. **On how many occasions (if any) have you used psychedelics other than LSD (like mescaline, peyote, psilocybin, PCP)...**

	0	1-2	3-5	6-9	10-19	20-39	40+
a. ...in your lifetime?	○	○	○	○	○	○	○
b. ...during the last 12 months?	○	○	○	○	○	○	○
c. ...during the last 30 days?	○	○	○	○	○	○	○

10. **On how many occasions (if any) have you used cocaine (sometimes called "coke")...**

	0	1-2	3-5	6-9	10-19	20-39	40+
a. ...in your lifetime?	○	○	○	○	○	○	○
b. ...during the last 12 months?	○	○	○	○	○	○	○
c. ...during the last 30 days?	○	○	○	○	○	○	○

11. **Amphetamines are sometimes prescribed by doctors to help people lose weight or to give people more energy. They are sometimes called uppers, ups, speed, bennies, dexies, pep pills, and diet pills.**
On how many occasions (if any) have you taken amphetamines on your own–that is, without a doctor telling you to take them. . .

	0 Occasions	1-2 Occasions	3-5 Occasions	6-9 Occasions	10-19 Occasions	20-39 Occasions	40 or More
a. ...in your lifetime?	○	○	○	○	○	○	○
b. ...during the last 12 months?	○	○	○	○	○	○	○
c. ...during the last 30 days?	○	○	○	○	○	○	○

12. **On how many occasions (if any) have you used quaaludes (quads, soapers, methaqualone) on your own–that is, without a doctor telling you to take them. . .**

	0	1-2	3-5	6-9	10-19	20-39	40+
a. ...in your lifetime?	○	○	○	○	○	○	○
b. ...during the last 12 months?	○	○	○	○	○	○	○
c. ...during the last 30 days?	○	○	○	○	○	○	○

13. **Barbiturates are sometimes prescribed by doctors to help people relax or get to sleep. They are sometimes called downs, downers, goofballs, yellows, reds, blues, rainbows.**
On how many occasions (if any) have you taken barbiturates on your own–that is, without a doctor telling you to take them. . .

	0	1-2	3-5	6-9	10-19	20-39	40+
a. ...in your lifetime?	○	○	○	○	○	○	○
b. ...during the last 12 months?	○	○	○	○	○	○	○
c. ...during the last 30 days?	○	○	○	○	○	○	○

14. **Tranquilizers are sometimes prescribed by doctors to calm people down, quiet their nerves, or relax their muscles. Librium, Valium, and Miltown are all tranquilizers.**
On how many occasions (if any) have you taken tranquilizers on your own–that is, without a doctor telling you to take them. . .

	0	1-2	3-5	6-9	10-19	20-39	40+
a. ...in your lifetime?	○	○	○	○	○	○	○
b. ...during the last 12 months?	○	○	○	○	○	○	○
c. ...during the last 30 days?	○	○	○	○	○	○	○

15. **On how many occasions (if any) have you used heroin (smack, horse, skag). . .**

	0	1-2	3-5	6-9	10-19	20-39	40+
a. ...in your lifetime?	○	○	○	○	○	○	○
b. ...during the last 12 months?	○	○	○	○	○	○	○
c. ...during the last 30 days?	○	○	○	○	○	○	○

16. **There are a number of narcotics other than heroin, such as methadone, opium, morphine, codeine, demerol, paregoric, talwin, and laudanum. These are sometimes prescribed by doctors.**

On how many occasions (if any) have you taken narcotics other than heroin on your own–that is, without a doctor telling you to take them. . .

	0	1-2	3-5	6-9	10-19	20-39	40+
a. ...in your lifetime?	○	○	○	○	○	○	○
b. ...during the last 12 months?	○	○	○	○	○	○	○
c. ...during the last 30 days?	○	○	○	○	○	○	○

17. **On how many occasions (if any) have you sniffed glue, or breathed the contents of aerosol spray cans, or inhaled any other gases or sprays in order to get high. . .**

	0	1-2	3-5	6-9	10-19	20-39	40+
a. ...in your lifetime?	○	○	○	○	○	○	○
b. ...during the last 12 months?	○	○	○	○	○	○	○
c. ...during the last 30 days?	○	○	○	○	○	○	○

Below is the follow-up version of Question 1 in Part B. Questions 2 through 17 are identical in the base-year and follow-up versions.

PART B

The following questions are about cigarette smoking.

1. **Which best describes your cigarette smoking in the last 12 months?**

① Have not smoked at all–GO TO QUESTION **3**
② Smoked once or twice
③ Smoked occasionally but not regularly
④ Smoked regularly but stopped or cut back
⑤ Smoke regularly now

APPENDIX D

BACKGROUND MEASURES

(Part C of All Base-Year Forms)

PART C

These next questions ask for some background information about yourself.

1. In what year were you born?

① Before '58 ③ 1959 ⑤ 1961 ⑦ 1963
② 1958 ④ 1960 ⑥ 1962 ⑧ After 1963

2. In what month were you born?

① January ④ April ⑦ July ⑩ October
② February ⑤ May ⑧ August ⑪ November
③ March ⑥ June ⑨ September ⑫ December

3. What is your sex? ① Male ② Female

4. How do you describe yourself?

① American Indian
② Black or Afro-American
③ Mexican American or Chicano
④ Puerto Rican or other Latin American
⑤ Oriental or Asian American
⑥ White or Caucasian
⑦ Other

(continued on next page)

5. Where did you grow up mostly?

① On a farm
② In the country, not on a farm
③ In a small city or town (under 50,000 people)
④ In a medium-sized city (50,000 - 100,000)
⑤ In a suburb of a medium-sized city
⑥ In a large city (100,000 - 500,000)
⑦ In a suburb of a large city
⑧ In a very large city (over 500,000)
⑨ In a suburb of a very large city
⑩ Can't say; mixed

6. What is your present marital status?

① Married
② Engaged
③ Separated/divorced
④ Single

7. Which of the following people live in the same household with you? (Mark ALL that apply.)

○ I live alone
○ Father (or male guardian)
○ Mother (or female guardian)
○ Brother(s) and/or sister(s)
○ Grandparent(s)
○ My husband/wife
○ My children
○ Other relative(s)
○ Non-relative(s)

The next three questions ask about your parents. If you were raised mostly by foster parents, step-parents, or others, answer for them. For example, if you have both a step-father and a natural father, answer for the one that was most important in raising you.

8. What is the highest level of schooling your father completed?

○ Completed grade school or less
○ Some high school
○ Completed high school
○ Some college
○ Completed college
○ Graduate or professional school after college
○ Don't know, or does not apply

9. What is the highest level of schooling your mother completed?

○ Completed grade school or less
○ Some high school
○ Completed high school
○ Some college
○ Completed college
○ Graduate or professional school after college
○ Don't know, or does not apply

10. Did your mother have a paid job (half-time or more) during the time you were growing up?

① No
② Yes, some of the time when I was growing up
③ Yes, most of the time
④ Yes, all or nearly all of the time

11. How would you describe your political preference? (Mark one.)

① Strongly Republican
② Mildly Republican
③ Mildly Democrat
④ Strongly Democrat
⑤ American Independent Party
⑥ No preference, independent
⑦ Other

⑧ Don't know, haven't decided

12. How would you describe your political beliefs? (Mark one.)

① Very conservative
② Conservative
③ Moderate
④ Liberal
⑤ Very liberal
⑥ Radical

⑧ None of the above, or don't know

13. The next three questions are about religion.

a. What is your religious preference?

① Baptist
② Churches of Christ
③ Disciples of Christ
④ Episcopal
⑤ Lutheran
⑥ Methodist
⑦ Presbyterian
⑧ United Church of Christ
⑨ Other Protestant
⑩ Unitarian
⑪ Roman Catholic
⑫ Eastern Orthodox
⑬ Jewish
⑭ Other religion
⑮ None

b. How often do you attend religious services?

① Never
② Rarely
③ Once or twice a month
④ About once a week or more

c. How important is religion in your life?

① Not important
② A little important
③ Pretty important
④ Very important

14. When are you most likely to graduate from high school?

① By this June
② July to January
③ After next January

④ Don't expect to graduate

15. Which of the following best describes your present high school program?

① Academic or college prep
② General
③ Vocational, technical, or commercial
④ Other, or don't know

16. Compared with others your age throughout the country, how do you rate yourself on school ability?

17. How intelligent do you think you are compared with others your age?

	Far Below Average	Below Average	Slightly Below Average	Average	Slightly Above Average	Above Average	Far Above Average
16.	①	②	③	④	⑤	⑥	⑦
17.	①	②	③	④	⑤	⑥	⑦

18. During the LAST FOUR WEEKS, how many whole days of school have you missed...

	None	1 Day	2 Days	3 Days	4 to 5 Days	6 to 10 Days	11 or More
a. Because of illness	○	○	○	○	○	○	○
b. Because you skipped or "cut"	○	○	○	○	○	○	○
c. For other reasons	○	○	○	○	○	○	○

19. During the last four weeks, how often have you gone to school, but skipped a class when you weren't supposed to?

① Not at all
② 1 or 2 times
③ 3-5 times
④ 6-10 times
⑤ 11-20 times
⑥ More than 20 times

20. Which of the following best describes your average grade so far in high school?

⑨ A (93-100)
⑧ A- (90-92)
⑦ B+ (87-89)
⑥ B (83-86)
⑤ B- (80-82)
④ C+ (77-79)
③ C (73-76)
② C- (70-72)
① D (69 or below)

50

21. How likely is it that you will do each of the following things after high school? (Mark one for each line.)

	Definitely Won't	Probably Won't	Probably Will	Definitely Will
a. Attend a technical or vocational school	①	②	③	④
b. Serve in the armed forces	①	②	③	④
c. Graduate from a two-year college program	①	②	③	④
d. Graduate from college (four-year program)	①	②	③	④
e. Attend graduate or professional school after college	①	②	③	④

22. Suppose you could do just what you'd like and nothing stood in your way. How many of the following things would you WANT to do? (Mark ALL that apply.)

○ a. Attend a technical or vocational school
○ b. Serve in the armed forces
○ c. Graduate from a two-year college program
○ d. Graduate from college (four-year program)
○ e. Attend graduate or professional school after college
○ f. None of the above

23. On the average over the school year, how many hours per week do you work in a paid or unpaid job?

① None
② 5 or less hours
③ 6 to 10 hours
④ 11 to 15 hours
⑤ 16 to 20 hours
⑥ 21 to 25 hours
⑦ 26 to 30 hours
⑧ More than 30 hours

24. During an average week, how much money do you get from...

	None	$1 - 5	$6 - 10	$11 - 20	$21 - 35	$36 - 50	$51 +
a. A job or other work	○	○	○	○	○	○	○
b. Other sources (allowances, etc.)	○	○	○	○	○	○	○

25. During a typical week, on how many evenings do you go out for fun and recreation?

○ Less than one
○ One
○ Two
○ Three
○ Four or five
○ Six or seven

26. On the average, how often do you go out with a date (or your spouse, if you are married)?

① Never
② Once a month or less
③ 2 or 3 times a month
④ Once a week
⑤ 2 or 3 times a week
⑥ Over 3 times a week

27. During an average week, how much do you usually drive a car, truck, or motorcycle?

① Not at all
② 1 to 10 miles
③ 11 to 50 miles
④ 51 to 100 miles
⑤ 100 to 200 miles
⑥ More than 200 miles

28. Within the LAST 12 MONTHS how many times, if any, have you received a ticket (OR been stopped and warned) for moving violations, such as speeding, running a stop light, or improper passing?

⓪ None–GO TO QUESTION 30
① Once
② Twice
③ Three times
④ Four or more times

29. How many of these tickets or warnings occurred after you were. . .

	Never	Once	Twice	3 times	4 or more times
a. Drinking alcoholic beverages?	⓪	①	②	③	④
b. Smoking marijuana or hashish?	⓪	①	②	③	④
c. Using other illegal drugs?	⓪	①	②	③	④

30. We are interested in any accidents which occurred while you were driving a car, truck, or motorcycle. ("Accidents" means a collision involving property damage or personal injury–not bumps or scratches in parking lots.)

During the LAST 12 MONTHS, how many accidents have you had while you were driving (whether or not you were responsible)?

⓪ None–GO TO QUESTION 32
① One
② Two
③ Three
④ Four or more

31. How many of these accidents occurred after you were. . .

	Never	Once	Twice	3 times	4 or more times
a. Drinking alcoholic beverages	⓪	①	②	③	④
b. Smoking marijuana or hashish?	⓪	①	②	③	④
c. Using other illegal drugs?	⓪	①	②	③	④

32. If you have not entered military service, and do not expect to enter, GO TO PART D.

What is, or will be, your branch of service?

① Army
② Navy
③ Marine Corps
④ Air Force
⑤ Coast Guard
⑥ Uncertain

33. Do you expect to be an officer?

① No
② Uncertain
③ Yes

34. Do you expect to have a career in the Armed Forces?

① No
② Uncertain
③ Yes

APPENDIX E

POST-HIGH SCHOOL EXPERIENCES

(Part C of All Follow-Up Forms)

PART C

These next questions ask for some background information.

1. What is your present marital status?

① Married	③ Separated/divorced
② Engaged	④ Single

2. How many children do you have?

⓪ None	② Two
① One	③ Three or more

3. During most of March this year, where did you live?

○ House	○ Military base
○ Apartment	○ Dormitory
○ Rented room	○ Other

4. With whom did you live during March?
(Mark all that apply.)

○ My husband/wife	○ My parent(s)
○ My partner of the opposite sex	○ Spouse's parent(s)
○ My child(ren)	○ Others
	○ I live alone

(continued on next page)

5. Now we'd like to know about some things you are doing now, or have done, or plan to do. Please look at each activity listed below, and mark the circle which shows how likely you are to do EACH. (Mark ONE for each line.)

	I'm doing this now / I have done this	Definitely won't	Probably won't	Probably will	Definitely will
a. Attend technical or vocational school (after high school)	①	①	②	③	④
b. Serve on active duty in the armed forces	①	①	②	③	④
c. Attend a two-year college	①	①	②	③	④
d. Graduate from a two-year college program	①	①	②	③	④
e. Attend a four-year college	①	①	②	③	④
f. Graduate from a four-year college program	①	①	②	③	④
g. Attend graduate or professional school after college	①	①	②	③	④

6. What is the last year of school that you COMPLETED?

① 11th grade
② 12th grade
③ One year of college
④ Two years of college
⑤ Three years of college
⑥ Four years of college
⑦ Five or more years of college

7. What is the HIGHEST degree you have earned?

① Less than a high school diploma
② High school diploma or equivalency
③ Associate's degree
④ Bachelor's degree
⑤ Master's degree or other graduate degree

8. During March of this year, were you taking courses at any school or college? (Mark one.)

① No–GO TO QUESTION 12
② Yes, less than half-time
③ Yes, about half-time or more
④ Yes, as a full-time student

9. About how many students are enrolled at that school?

① 1 - 99
② 100 - 499
③ 500 - 999
④ 1,000 - 2,999
⑤ 3,000 - 9,999
⑥ 10,000 - 19,999
⑦ Over 20,000

10. Which of the following best describes your average grade this year (since last September)?

⑫ A (93-100)
⑪ A- (90-92)
⑩ B+ (87-89)
⑨ B (83-86)
⑧ B- (80-82)
⑦ C+ (77-79)
⑥ C (73-76)
⑤ C- (70-72)
④ D (69 or below)
⑬ No grades; don't know

11. What has been your major field of study this year?

① Office and clerical (bookkeeping, stenography, etc.)
② Vocational and technical fields
③ Biological sciences (zoology, physiology, etc.)
④ Business (accounting, marketing, personnel, etc.)
⑤ Education (elementary, special, physical, etc.)
⑥ Engineering (civil, electrical, etc.)
⑦ Humanities and Fine Arts (music, religion, English, etc.)
⑧ Physical Sciences and Mathematics (chemistry, etc.)
⑨ Social Sciences (psychology, history, etc.)
⑩ Other academic field
⑪ Academic, but undecided about which major field

12. The next questions ask about your employment during the first full week in March. If you were on vacation from work that week, answer for the week before your vacation.

Which BEST describes your employment during the first full week in March? (Mark one circle only.)

① Two or more different jobs
② One full-time job
③ One part-time job
④ Full-time homemaker (no outside job)
⑤ Laid-off or waiting to start a job
⑥ No paid employment at all that week

13a. Which BEST describes your primary job that week?	13b. Which BEST describes the last job you held?

⑭ Never had a job—GO TO QUESTION 19
① Laborer (car washer, sanitary worker, farm laborer)
② Service worker (cook, waiter, barber, janitor, gas station attendant, practical nurse, beautician)
③ Operative or semi-skilled worker (garage worker, taxicab, bus or truck driver, assembly line worker, welder)
④ Sales clerk in a retail store (shoe salesperson, department store clerk, drug store clerk)
⑤ Clerical or office worker (bank teller, bookkeeper, secretary, typist, postal clerk or carrier, ticket agent)
⑥ Protective service (police officer, fireman, detective)
⑦ Military service
⑧ Craftsman or skilled worker (carpenter, electrician, brick layer, mechanic, machinist, tool and die maker, telephone installer)
⑨ Farm owner, farm manager
⑩ Owner of a small business (restaurant owner, shop owner)
⑪ Sales representative (insurance agent, real estate broker, bond salesman)
⑫ Manager or administrator (office manager, sales manager, school administrator, government official)
⑬ Professional without doctoral degree (registered nurse, librarian, engineer, architect, social worker, technician, accountant, actor, artist, musician)
⑮ Professional with doctoral degree or equivalent (lawyer, physician, dentist, scientist, college professor)
⑮ None of the above

14. **Which BEST describes the kind of setting in which you did (do) this work? (Mark ONE.)**

① A large corporation
② A small business
③ A government agency
④ The military service
⑤ A school or university
⑥ A police department or police agency
⑦ A social service organization
⑧ With a small group of partners
⑨ On your own (self-employed)
⑩ None of these

15. **During March, about how many hours a week did you work on your job(s)?**

① 1-14 hours a week
② 15-29
③ 30-34
④ 35-39
⑤ 40 hours a week
⑥ 41-48
⑦ 49-59
⑧ 60 or more

⑨ Did not work in March—GO TO QUESTION

16. **During March, about how much did you earn PER HOUR on the average? (Answer for your most important job and include all earnings before deductions. If not sure, guess.)**

○ Did not get paid
○ Less than $2.00 per hour
○ $2.00 - $2.24
○ $2.25 - $2.49
○ $2.50 - $2.74
○ $2.75 - $2.99
○ $3.00 - $3.24
○ $3.25 - $3.49
○ $3.50 - $3.74
○ $3.75 - $3.99
○ $4.00 - $4.49
○ $4.50 - $4.99
○ $5.00 - $5.49
○ $5.50 - $5.99
○ $6.00 - $6.49
○ $6.50 - $6.99
○ $7.00 - $7.49
○ $7.50 - $7.99
○ $8.00 or more

17. **During all of last calendar year (January 1 to December 31), how many MONTHS were you working at a full-time paid job?**

⓪ None
① One
② Two
③ Three
④ Four
⑤ Five
⑥ Six
⑦ Seven
⑧ Eight
⑨ Nine
⑩ Ten
⑪ Eleven
⑫ Twelve

18. **During all of last year (January 1 to December 31), how much did you yourself earn, before taxes? (Include only pay for work, such as salary, wages, tips, commissions, etc.)**

○ $0
○ $1 - $999
○ $1,000 - $1,999
○ $2,000 - $2,999
○ $3,000 - $3,999
○ $4,000 - $4,999
○ $5,000 - $5,999
○ $6,000 - $6,999
○ $7,000 - $7,999
○ $8,000 - $8,999
○ $9,000 - $9,999
○ $10,000 - $10,999
○ $11,000 - $11,999
○ $12,000 - $14,999
○ $15,000 - $19,999
○ $20,000 - $24,999
○ $25,000 - $34,999
○ $35,000 or more

19. **During all of last year (January 1 - December 31), how much of your financial support came from each of the following sources?**
(Mark ONE circle for each line.)

	None	A little (1-20%)	Some (21-40%)	About half (41-60%)	Most (61-80%)	Almost all (81-99%)	All
a. Yourself	○	○	○	○	○	○	○
b. Your spouse	○	○	○	○	○	○	○
c. Your parents	○	○	○	○	○	○	○
d. Unemployment compensation	○	○	○	○	○	○	○
e. Welfare (ADC, food stamps, etc.)	○	○	○	○	○	○	○
f. All other sources	○	○	○	○	○	○	○

20. **During all of last year (January 1 to December 31), how many weeks were you unemployed AND looking for work, or on lay-off from a job?**

○ None
○ 1 - 2 weeks
○ 3 - 4 weeks
○ 5 - 9 weeks
○ 10 -14 weeks
○ 15 - 20 weeks
○ 21 - 26 weeks
○ 27 or more weeks

The next questions are about some other things in your life.

21. **How would you describe your political preference? (Mark ONE.)**

① Strongly Republican
② Mildly Republican
③ Mildly Democrat
④ Strongly Democrat
⑤ American Independent Party
⑥ No preference, independent
⑦ Other
⑧ Don't know, haven't decided

22. **How would you describe your political beliefs? (Mark ONE.)**

① Very conservative
② Conservative
③ Moderate
④ Liberal
⑤ Very liberal
⑥ Radical
⑦ None of the above, or don't know

23. **How often do you attend religious services?**

① Never
② Rarely
③ Once or twice a month
④ About once a week or more

24. **How important is religion in your life?**

① Not important
② A little important
③ Pretty important
④ Very important

25. **During a typical week, on how many evenings do you go out for fun and recreation?**

○ Less than one
○ One
○ Two
○ Three
○ Four or five
○ Six or seven

26. On the average, how often do you go out with a date (or your spouse, if you are married)?

① Never
② Once a month or less
③ 2 or 3 times a month
④ Once a week
⑤ 2 or 3 times a week
⑥ Over 3 times a week

27. During an average week, how much do you usually drive a car, truck, or motorcycle?

① Not at all
② 1 to 10 miles
③ 11 to 50 miles
④ 51 to 100 miles
⑤ 100 to 200 miles
⑥ More than 200 miles

28. Within the LAST 12 MONTHS how many times, if any, have you received a ticket (OR been stopped and warned) for moving violations, such as speeding, running a stop light, or improper passing?

⓪ None–GO TO QUESTION **30**
① Once
② Twice
③ Three times
④ Four or more times

29. How many of these tickets or warnings occurred after you were...

	None	One	Two	Three	Four+
a. Drinking alcoholic beverages?	⓪	①	②	③	④
b. Smoking marijuana or hashish?	⓪	①	②	③	④
c. Using other illegal drugs?	⓪	①	②	③	④

30. We are interested in any accidents which occurred while you were driving a car, truck, or motorcycle. ("Accidents" means a collision involving property damage or personal injury–not bumps or scratches in parking lots.)

During the LAST 12 MONTHS, how many accidents have you had while you were driving (whether or not you were responsible)?

⓪ None–GO TO QUESTION **32**
① One
② Two
③ Three
④ Four or more

31. How many of these accidents occurred after you were...

	None	One	Two	Three	Four+
a. Drinking alcoholic beverages	⓪	①	②	③	④
b. Smoking marijuana or hashish?	⓪	①	②	③	④
c. Using other illegal drugs?	⓪	①	②	③	④

32. During March of this year did you live mostly...

① On a farm
② In the country, not on a farm
③ In a small city or town (under 50,000 people)
④ In a medium-sized city (50,000 - 100,000)
⑤ In a suburb of a medium-sized city
⑥ In a large city (100,000 - 500,000)
⑦ In a suburb of a large city
⑧ In a very large city (over 500,000)
⑨ In a suburb of a very large city

APPENDIX F

BASE-YEAR ADDRESS FORM

Before filling out this address page, please separate it from the rest of the questionnaire by FOLDING ALONG THE PERFORATED LINE AND TEARING CAREFULLY.

WHY YOUR NAME AND ADDRESS?

As we told you earlier, we'd like to send you a summary of the nationwide results of the present study, and in about a year we want to mail a shorter questionnaire to some of you. In order to include you in these follow-ups, we would like to have an address where information will be sure to reach you during the coming year.

HOW IS CONFIDENTIALITY PROTECTED?

- **The information on this page will be used ONLY for mailing, and will always be kept separate from your answers. A special Grant of Confidentiality from the U.S. government protects all information gathered in this research project.**
- **The questionnaire and address pages will be collected separately, sealed immediately in separate envelopes, and sent to two different cities for processing.**
- **Once a questionnaire and address page have been separated, there is no way they can be matched, except by using a special computer tape at the University of Michigan. That tape contains the two DIFFERENT numbers that appear on the back of this address page and on the back of the questionnaire. These numbers will be used ONLY to match a follow-up questionnaire with this one.**

Please **PRINT** your name and the address where you can most likely be reached during the coming year.

Mr.
Miss
Ms. FIRST NAME INITIAL LAST NAME
Mrs.

STREET _____

CITY _____

STATE _____ ZIP _____

TELEPHONE NO. ( ) - _____
AREA

In case we should have trouble getting mail to you, if you move, please **PRINT** the name and address of one other person (with a different address than your own) who will know where to reach you in the future. (Examples of such a person: aunt or uncle, older sister or brother, or close friend.)

Mr.
Miss
Ms. FIRST NAME INITIAL LAST NAME
Mrs.

STREET _____

CITY _____

STATE _____ ZIP _____

TELEPHONE NO. ( ) - _____
AREA

THANK YOU AGAIN FOR YOUR HELP

(Inside back cover--all base-year forms)

APPENDIX G

FOLLOW-UP ADDRESS CORRECTION FORM

FIRST CLASS
PERMIT NO. 284
Ann Arbor, Mich.

HOW CONFIDENTIALITY IS PROTECTED

- Your name and address are used ONLY for mailing and will always be kept separate from your answers. A special Grant of Confidentiality from the U.S. Government protects all information gathered in this research project.
- The address card (should you need to send us one) will arrive separately from the questionnaire; the questionnaire will have nothing on it that identifies you by name, just a code number.
- The code number on the questionnaire cannot be matched with your name, except by using a special computer tape at The University of Michigan. That tape will be used ONLY to match this year's questionnaire with the one you filled out in high school.

THANK YOU AGAIN FOR YOUR HELP

BUSINESS REPLY MAIL
No postage stamp necessary if mailed in the United States

POSTAGE WILL BE PAID BY

MONITORING THE FUTURE
INSTITUTE FOR SOCIAL RESEARCH
THE UNIVERSITY OF MICHIGAN
BOX 1248
ANN ARBOR, MICHIGAN 48106

(Inside back cover--all follow-up forms)

ADDRESS CARD

Please check the mailing label below.

HAVE YOU MOVED OR ARE YOU ABOUT TO MOVE?

HAS YOUR NAME CHANGED OR WILL IT SOON CHANGE?

ARE THERE ERRORS ON THE LABEL?

- If YES (for any of these), please fill out the correct information in the box. → Then separate this card and mail it to us. (The card requires no postage; simply drop it in the mailbox.)
- If the label is completely correct, then separate this card and throw it away. (If we don't hear from you, we will assume the label is correct.)

Mr.
Miss
Ms. FIRST NAME INITIAL LAST NAME
Mrs.

STREET _____

CITY _____

STATE _____ ZIP _____

TELEPHONE NO. (Area) _____

(Outside back cover--all follow-up forms)

- 54 -

BEFORE MAILING BACK THE QUESTIONNAIRE, PLEASE SEPARATE THIS CARD BY FOLDING ALONG THE PERFORATED LINE AND TEARING CAREFULLY.

APPENDIX H
Letter of Invitation to New Schools

ISR

SURVEY RESEARCH CENTER / INSTITUTE FOR SOCIAL RESEARCH / THE UNIVERSITY OF MICHIGAN / ANN ARBOR, MICHIGAN 48106

September 15, 1978

Mr. John Jones, Principal
Main Senior High School
600 North 10th Street
Sometown, Arizona 72315

Dear Mr. Jones:

I am writing to invite your school's participation in a nationwide study being conducted by The University of Michigan's Institute for Social Research. The study, "Monitoring the Future: A Continuing Study of the Lifestyles and Values of Youth," is now in its fifth year. It focuses on the views of American youth on a broad range of nationally important issues including education, work, achievement, leisure, ecology, drugs, social justice and the functioning of many of our major institutions. These views are obtained through questionnaires administered to seniors and through questionnaires sent to a sample of those seniors in following years.

In order to obtain an accurate cross-section of all seniors in the United States, we have used carefully controlled sampling procedures to select 130 high schools across the country each year. Your school is one of the relatively few selected by this process and your participation is of considerable importance to the representativeness of the national sample.

We have developed procedures which have minimal impact on the normal functioning of a school--a factor which I know is of concern to you. A telephone follow-up of principals previously involved indicates we were successful in these efforts. Of those contacted, over 90% said they would recommend participation in the study to other principals, and to date over 300 high schools have participated. In addition, seniors have reported the questionnaires to be interesting and worthwhile.

The information your seniors give will be kept in complete confidence and will be reported in a statistical fashion which will not identify individual seniors or schools. We have secured a Grant of Confidentiality from the U.S. Department of Justice which fully ensures our ability to keep the data confidential.

In about a week, I or one of my colleagues will be calling you to discuss the study further and answer any questions you may have. We very much hope that you will help us to continue with this important and exciting venture. In the meantime, thank you very much for your consideration.

Sincerely yours,

Lloyd D. Johnston, Ph.D.
Program Director

LDJ:ral

P.S. The enclosed brochure provides an overview of the scope and design of the study. However, there are several additional points of particular relevance to your school's participation.

1. Although the study is ongoing, the help which we ask of you is limited to two occasions. We ask that you participate this year, and, hopefully, again in the spring of 1980. After that, another school will be sampled to replace yours.

2. Your school's participation would mean that early in your winter semester, a staff member of Monitoring the Future would call you, or a person designated by you, to work out the details for a spring administration of a 45-minute questionnaire to some or all of your seniors (up to 300 depending on the size of your school). We would not be asking teachers or other school personnel to fill out any questionnaires nor would we be asking for any student records.

3. Several weeks in advance of the administration, a Survey Research Center interviewer living in your area would deliver fliers explaining the study (copy enclosed) for distribution to your seniors and their teachers. On the scheduled day of the survey, our trained interviewers would come to your school to handle the administration of the questionnaires to your seniors, preferably right in their classrooms during normal class periods. Student participation is, of course, completely voluntary.

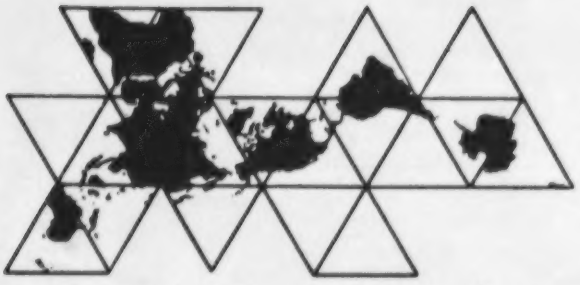
4. Our research program has been reviewed carefully and approved by the Data Acquisitions Subcommittee of the Council of Chief State School Officers. We have also established a permanent panel of advisors which includes many noted educators, specialists in youth problems, and experts on research methods.

5. After participating, each school receives free copies of our national reports based on nationwide data. In addition, an individualized report based on the average of combined responses of students in your school will be available on request. (These individual school reports are prepared <u>solely</u> for the purpose of providing information to participating schools. A report is provided only to the principal, and only if the principal requests it.)

Enclosures

APPENDIX I

FOUR-PAGE DESCRIPTION OF STUDY



monitoring the future

a continuing study of the lifestyles and values of youth

It is virtually a truism that cultural change is largely initiated – or, if not initiated, effectuated – by the young. Everyone has his favorite speculation about how America has been altered by the "youth culture," about how the "mood of youth" has changed since the "silent 50's," and so on. But there is a dearth of reliable observations. We assume, moreover, that experiences in youth are portentous of the orientations that will be fairly firm in later phases of the life cycle; but we have little or no documentation of what these experiences may be.

Two alternatives exist. One, of course, is to continue to exist with no systematic research -- then everyone can continue to expound his favorite explanation of what is happening. The other is to do the job properly, making use of the most powerful techniques of modern social science.

Social Reporting for the 1970's
E.B. Sheldon and K.C. Land

OVERVIEW OF THE PROJECT SCOPE AND PURPOSES

As its title suggests, the Monitoring the Future project is designed to assess the changing lifestyles, values, and preferences of American youth on a continuing basis. The study involves a nationwide survey of each new high school senior class; the first was the class of 1975. In addition, annual follow-up surveys are being mailed to a sample of each class for a six-year period after graduation.

The issues addressed are broad in scope and of fundamental importance to the nation: views about personal lifestyles, confidence in social institutions, intergroup and interpersonal attitudes, concerns about conservation and ecology, behaviors and attitudes related to drug use, and other social and ethical issues. A major emphasis is placed on drug use (and attitudes about drugs) both because the use of drugs is itself a particularly serious problem among young people, and also because it is a symptom of other deeper problems and discontents.

We have chosen to focus on youth because much of the current upheaval in values and attitudes is especially concentrated among youth, because it is among youth that significant changes along these dimensions are likely to occur first on any substantial scale, and most important, because youth in a very literal sense will constitute our future society.

There are several reasons for selecting the senior year in high school as an optimal starting point for charting the views of young adults. First, the senior year represents the end point in our system of universal public education, and thus reflects the cumulated impact of that educational system. A research effort that examines the views of seniors will thus indicate changes (or the lack thereof) in the impact of public education in the nation.

Second, the end of high school marks a point from which young people move into a number of different new environments with educational and socializing consequences -- college, military service, business firms, etc. By comparing responses given as seniors with later responses in follow-up measurements, we can assess some of the impacts of these different post-high school experiences. Except for college, these social environments have been the subject of very little systematic attention until now, despite the fact that the majority of young Americans never enter college.

Finally, there are important practical advantages to building our system of data collections around samples of high school seniors, since the last year of high school constitutes the final point at which a reasonably good national cross-section of young people can be sampled accurately and studied economically.

SURVEY RESEARCH CENTER'S SAMPLING AREAS IN THE UNITED STATES

SOME ISSUES TO BE ADDRESSED

The questions listed below provide a sampling of the kinds of issues treated in this study:

- Is there emerging a generation with a fundamentally different lifestyle and set of values? If so, what are the changes and how fast are they occurring? What are the implications of these changes for the future of the society?
- Has the rapid trend toward more widespread drug and alcohol use peaked yet, or even reversed? What are the trends for specific substances within this broad category? Is the social meaning of drug use changing?
- Are generational antagonisms diminishing or increasing and, if so, under what circumstances?
- How are the attitudes of youth toward the American system of government and the agencies of the government changing? Where does government fall short in the eyes of young people, and what reforms are favored?
- Is the increasing discussion of the problems of pollution, scarce resources, and overpopulation accompanied by substantial changes in lifestyle values and preferences? If so, what are they? What kinds of changes and sacrifices are young people prepared to make to solve these problems?
- How do young people feel about the educational and economic opportunities offered them by "the system"? Do they feel they are treated fairly?
- Are there important subgroups of young people who feel left out of the mainstream of American life in terms of educational, economic, and political opportunities?
- What implications will findings in these areas have for curricular and organizational changes in the schools?

Data bearing on these and other questions will be of value only if widely disseminated -- only if policy-makers know about them. In other words, the findings must form a sort of "feedback loop" to decision-makers at all levels in the society.

We will continue to publicize the findings widely, both through the news media and through contacts with relevant agencies. In particular, the Federal drug agencies, and others concerned with drug problems, are keenly interested in the findings from this project, and they expect Federal drug policies to be influenced by the results.* We have also found considerable interest on the part of educators, not just in the drug-related findings but in youth views about education, longer-range occupational desires, lifestyle preferences, and other dimensions that may indicate both the current impact of education and some needs for future programs. In addition, the project is relevant to political leaders in general, since the findings provide some assessment of the "state of the nation's youth." The topics are clearly relevant to the governance of society, and the data over time represent not only a continuous "straw vote" of the young but also some particularly important information on the emergence of new social problems and the progress being made on old ones.

*The major sponsors of the project have been the White House Special Action Office for Drug Abuse Prevention, the National Institute on Drug Abuse, and the National Institute of Education. Other related agencies to which we will report the results directly include the U.S. Office of Education, departments of education in the fifty states, the National Institute on Alcoholism and Alcohol Abuse, the National Clearinghouse for Smoking and Health, and the National Institute of Mental Health. A special effort will also be made to get the findings to those concerned with the education and development of young people at the community level.

STUDY DESIGN AND RATIONALE

The heart of the monitoring system consists of a series of annual, nationwide questionnaire surveys of seniors in high schools, which began with the class of 1975. In addition, annual follow-up surveys will be mailed to a subset of each sample for the first six years following their graduation. This design, which samples most young American men and women in the age range of approximately 18 to 24, will permit us to distinguish four kinds of trends: (1) changes from one graduating class to another, (2) life cycle or maturational changes which show up consistently for all graduating classes, (3) changes in particular years reflected across all age groups (secular trends), and (4) changes linked to different types of environments, such as college, military service, trade school or employment.

The initial data collections each year take place in about 115 public high schools and about 15 private high schools, selected by the Sampling Section of the Survey Research Center to provide an accurate cross-section of high school seniors throughout the United States. The number of schools was kept small deliberately, both as an economy measure and as a means for limiting the total demands placed on the educational community.

Within each school, up to 300 seniors are sampled. In schools with less than 300 seniors, the total senior class is included; in larger schools, a subset of seniors is selected by sampling classrooms or by other methods convenient for the school. The total sample of seniors each year numbers about 18,000, a figure that is in some respects misleadingly large. In order to keep questionnaires short enough to be completed in about 45 minutes, and yet cover a wide range of topics, five different questionnaire forms are used; therefore, the sample *for any given form* includes about 3,600 seniors.

The questionnaires are administered by the Survey Research Center staff, usually in classrooms. As noted above, the questionnaires are kept brief so that they can be completed in a single class period. Institute staff members are used in all data collections to avoid placing any unnecessary burden on school staff and also to provide further guarantees of the confidentiality of the data provided by the seniors.

In sum, the study design provides a fairly large, nationally representative sample of high school seniors in a manner that is both cost-effective and minimally disruptive to the educational community. We limit the number of schools involved each year to about 130 high schools and limit the data collection to single class periods in most schools. Finally, we provide our own staff for questionnaire administration.

SURVEY RESEARCH CENTER
THE INSTITUTE FOR SOCIAL RESEARCH

The organization conducting this study is the University of Michigan's Institute for Social Research in Ann Arbor, Michigan. The Institute is the world's largest university-based social science research organization and has a world-wide reputation for its work in the fields of sociology, psychology, political science, economics, and education. The Survey Research Center, the largest of four centers in the Institute, has been conducting nationwide surveys of adults and young people for more than thirty years.

Printed on 100% recycled paper

APPENDIX J

INSTRUCTIONS TO TEACHERS

monitoring **the future**

a continuing study of the lifestyles and values of youth

To: **Teachers in participating classrooms**

From: **The staff of the Monitoring the Future project**
Institute for Social Research / The University of Michigan

As you have probably heard, The University of Michigan will be conducting a survey of the seniors in your school. As a teacher you will play an important part in the success of this study. For one thing, in many schools the teachers in participating classes will be the first to announce the study to the students and distribute the fliers which describe the study in more detail. The manner in which the survey is announced will convey much about the importance of the project. In addition, the teacher's presence in the room on the day the survey is administered may be important to help maintain an orderly and businesslike atmosphere. Therefore we would appreciate your taking a few minutes to familiarize yourself with the nature of the study and what we would like you to do.

Attached to this memo is a four-page brochure which describes the purposes, rationale, and general design of the Monitoring the Future study. We are also including a supply of orange fliers for the students, which you may want to glance over.

Announcing the Survey

About a week before the survey is going to take place, we would like you to hand out the orange fliers to the seniors, post the four-page brochure on the bulletin board or elsewhere, and make the following announcement:

- **The University of Michigan is conducting a nation-wide survey of high school seniors. Seniors in this school are being asked to take part in that survey. (In some schools all seniors are asked to participate. In larger schools only a sample of the seniors are included.)**
- **The questionnaires used in the survey are not tests. There are no right or wrong answers; the questionnaires simply ask about the feelings, opinions, and experiences of young people.**
- **The purpose of the survey is to learn how young people feel about a number of important issues--- things like education, work, leisure, ecology, drugs, social justice, and government policies.**
- **The flier provides some information about the study. Those who would like more information can look over the four-page brochure.**

We hope that your short introduction will convey to the students that you consider the project to be important and worthwhile.

(continued on other side)

Questionnaire Administration

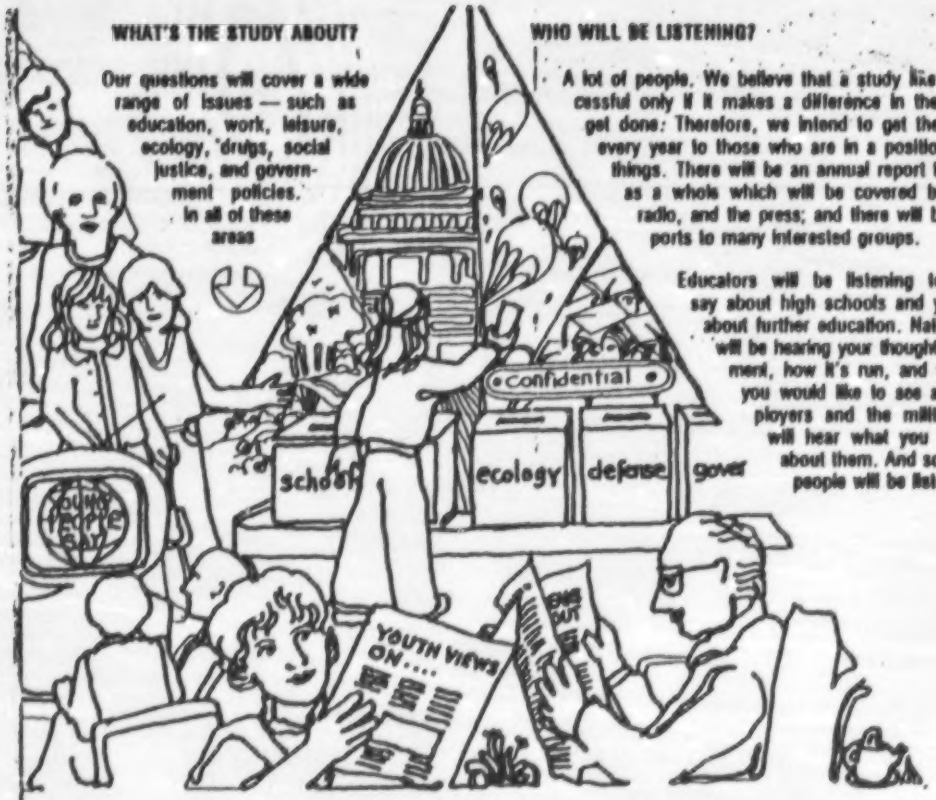
The actual administration of the questionnaires will be done by experienced members of The University of Michigan's interviewing staff. (In most cases these are people who live in your area and are regularly employed by the university to conduct nationwide surveys.) This means that teachers will not be burdened with any administrative responsibilities. There are just two things we are asking you to do. First, we would like you to introduce our staff member to the students. A very brief introduction will suffice, such as: "This is Mrs. Smith representing The University of Michigan. She is here today to conduct the Monitoring the Future survey you heard about earlier."

In addition, to help guarantee an orderly atmosphere for the survey, we would prefer that you remain present while the questionnaires are administered. Once the students begin work on the questionnaires you will not be asked for any other help, so you will be free to use the time for your own work. As a matter of fact, we urge you to avoid walking around the room; then students won't feel that you might see their answers. Our staff member will be prepared to respond to any questions from students.

This is all we are asking you to do. We think it will mean a lot for the quality of the responses to our questionnaires. Thanks in advance for your help.

APPENDIX K

FLYER TO SENIORS



WHAT'S THE STUDY ABOUT?

Our questions will cover a wide range of issues — such as education, work, leisure, ecology, drugs, social justice, and government policies. In all of these areas we want to know your feelings about how things are — and how things ought to be in the future. In a sense, we believe that your answers will count as a kind of vote on many of these issues.

The 'votes' of all of the participants in the study, taken together, will be a very accurate indication of how all American young people feel. Next year and in the following years other high school seniors will also be asked for their ideas on these subjects, so that we can find out how much things change from one class to the next.

WHO WILL BE LISTENING?

A lot of people. We believe that a study like this is successful only if it makes a difference in the way things get done. Therefore, we intend to get the results out every year to those who are in a position to change things. There will be an annual report to the nation as a whole which will be covered by television, radio, and the press; and there will be special reports to many interested groups.

Educators will be listening to what you say about high schools and your feelings about further education. National leaders will be hearing your thoughts on government, how it's run, and what policies you would like to see adopted. Employers and the military services will hear what you have to say about them. And so on. A lot of people will be listening.

WILL ANYONE I KNOW SEE MY ANSWERS?

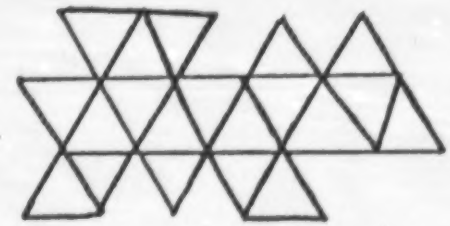
No. Your individual answers are never seen by anyone in your school, or anyone else who knows you. We even have a special Grant of Confidentiality from the U.S. government which protects all information gathered in the study.

WHO IS DOING THIS STUDY?

The University of Michigan's Institute for Social Research is one of the world's largest and most respected social research organizations. It has been conducting nationwide surveys for over 30 years.

ISR

you are invited to participate in. . .



MONITORING THE FUTURE

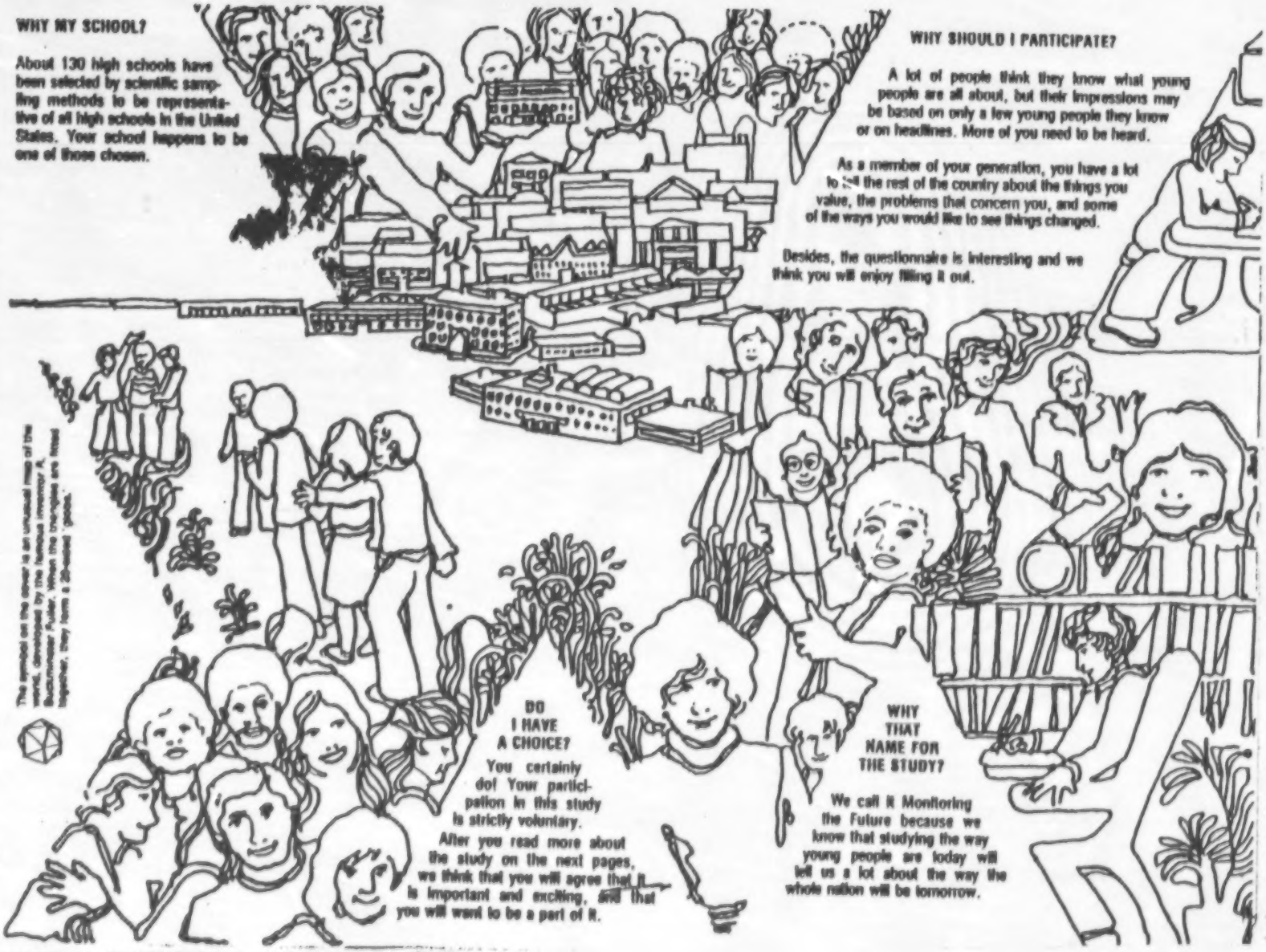
a continuing study of the lifestyles and values of youth

In a week or so a number of seniors in your school will be asked to participate in an important nationwide survey.

This flier tells you about the study and answers some questions you may have.

Institute for Social Research

The University of Michigan


WHY MY SCHOOL?
About 130 high schools have been selected by scientific sampling methods to be representative of all high schools in the United States. Your school happens to be one of those chosen.
WHY SHOULD I PARTICIPATE?
A lot of people think they know what young people are all about, but their impressions may be based on only a few young people they know or on headlines. More of you need to be heard.
As a member of your generation, you have a lot to tell the rest of the country about the things you value, the problems that concern you, and some of the ways you would like to see things changed.
Besides, the questionnaire is interesting and we think you will enjoy filling it out.
DO I HAVE A CHOICE?
You certainly do! Your participation in this study is strictly voluntary.
After you read more about the study on the next pages, we think that you will agree that it is important and exciting, and that you will want to be a part of it.
WHY THAT NAME FOR THE STUDY?
We call it Monitoring the Future because we know that studying the way young people are today will tell us a lot about the way the whole nation will be tomorrow.

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